

FIG. 1
(PRIOR ART)

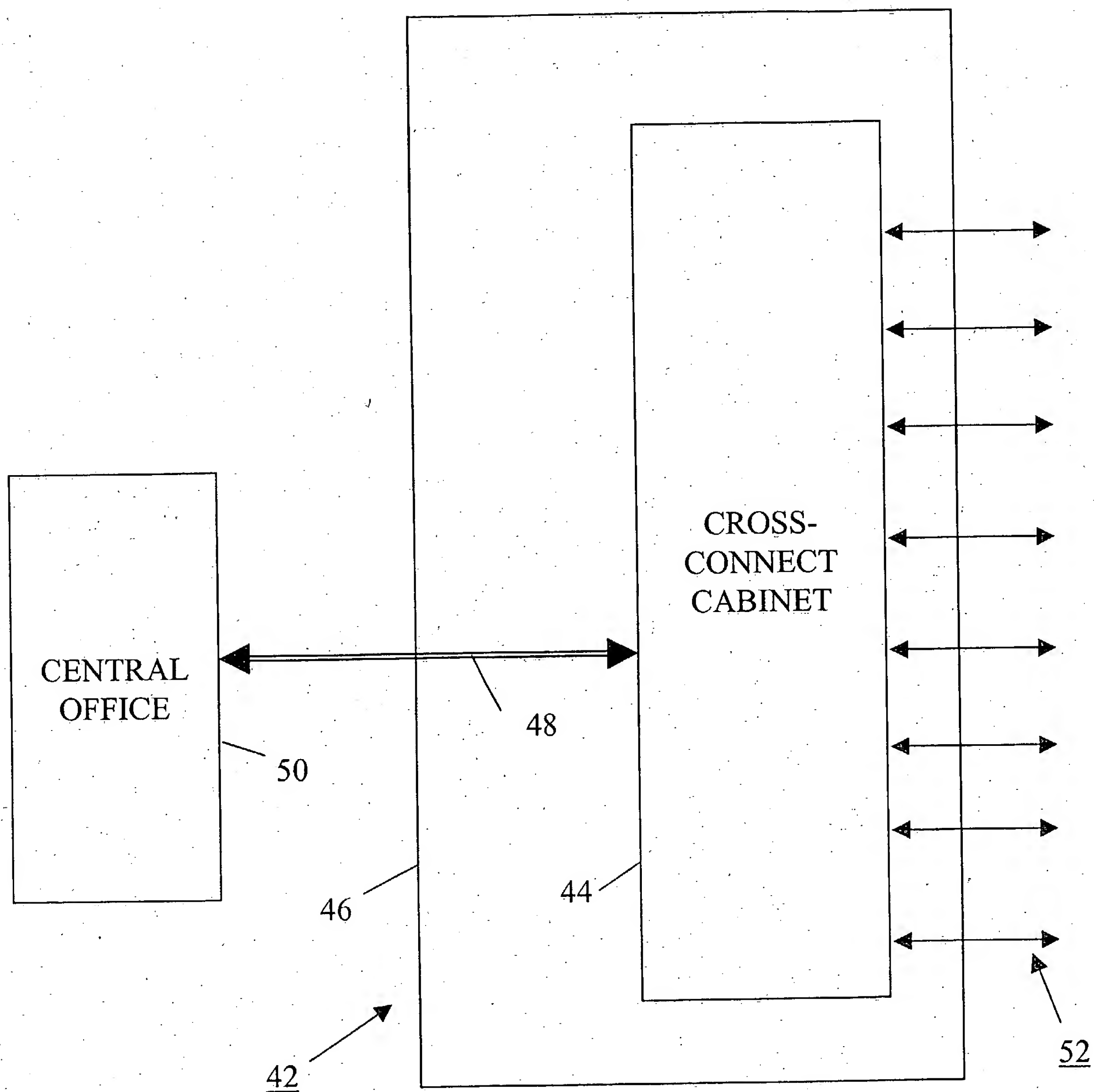


FIG. 2
(PRIOR ART)

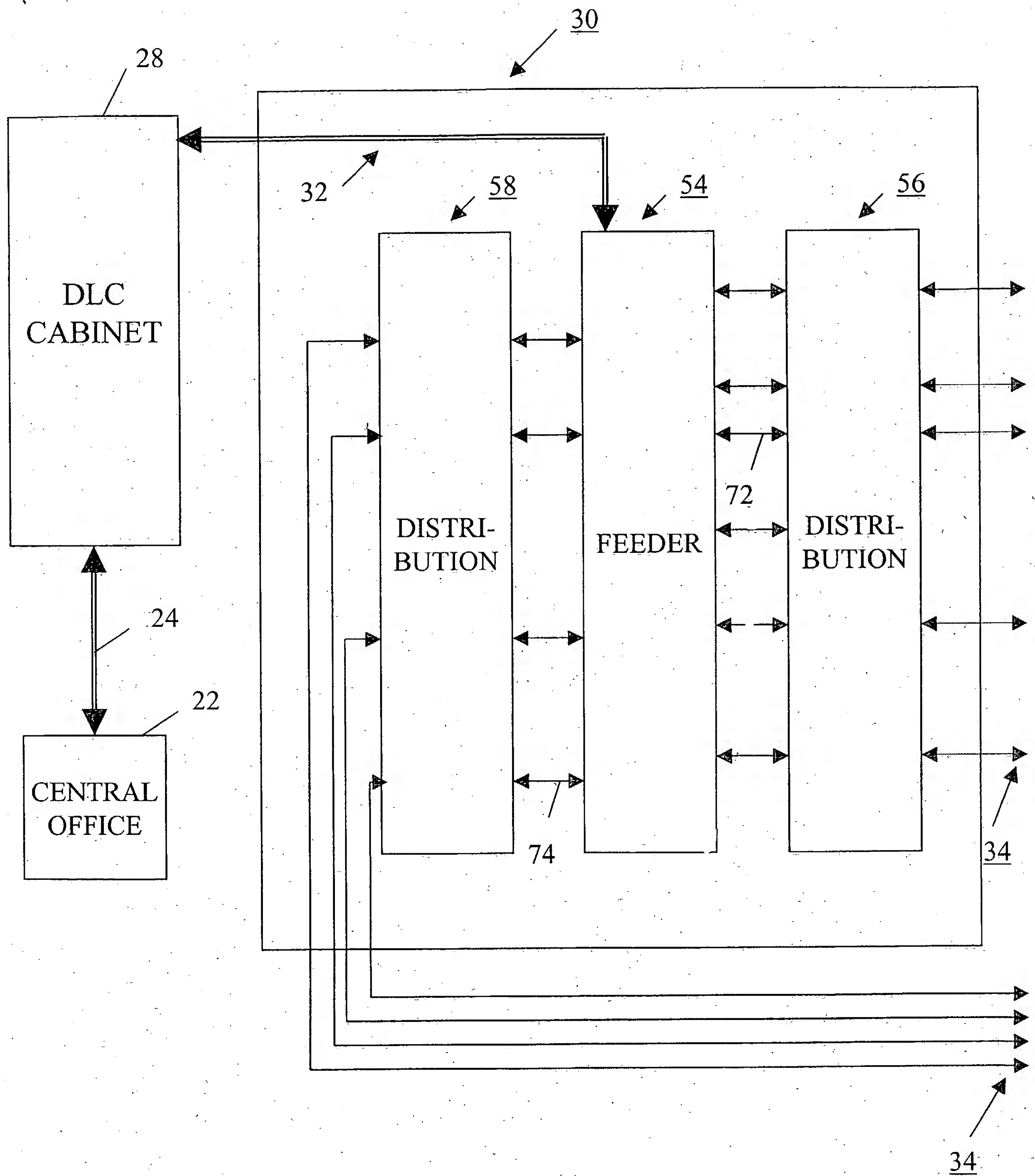


FIG. 3
(PRIOR ART)

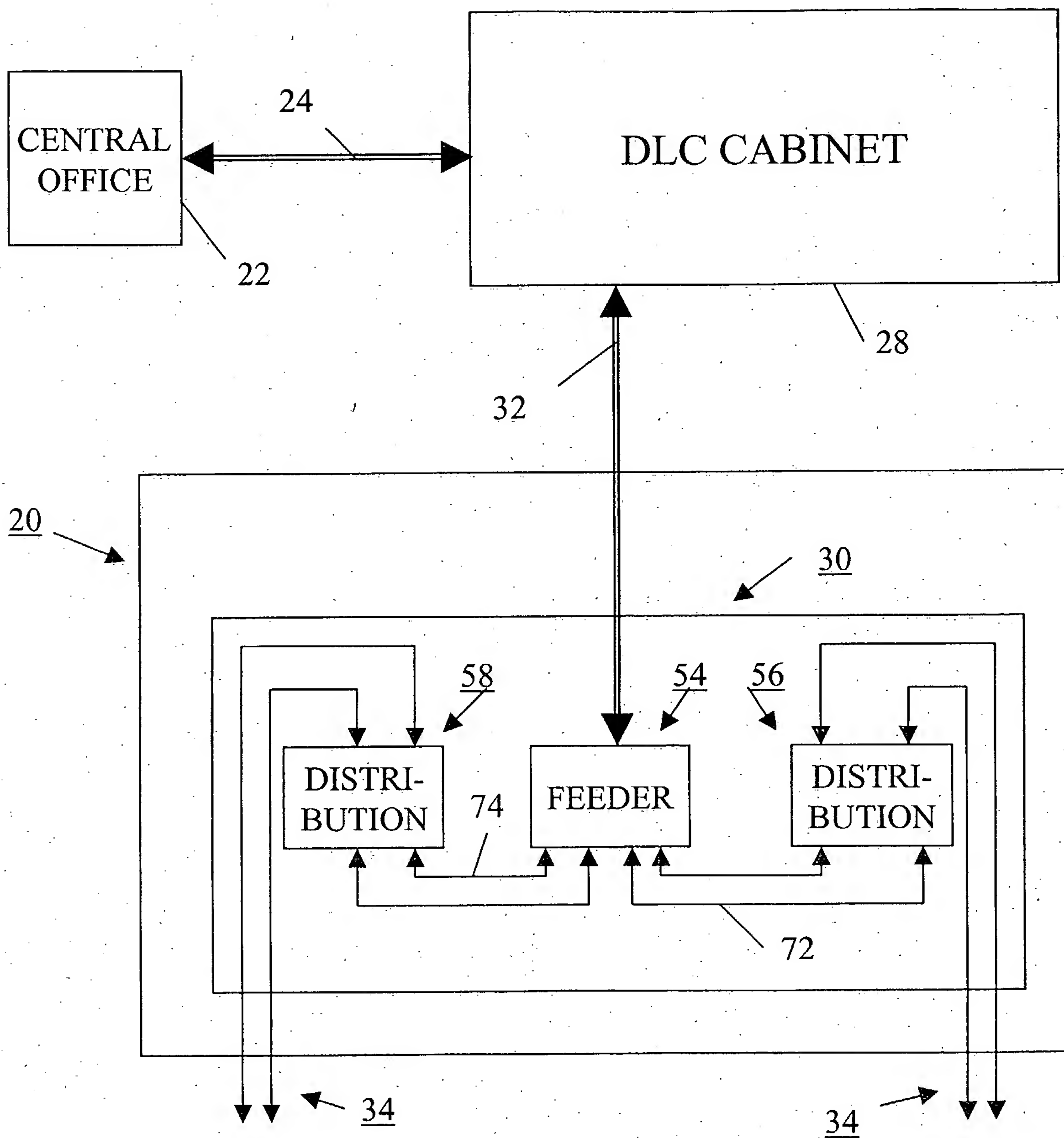


FIG. 4
(PRIOR ART)

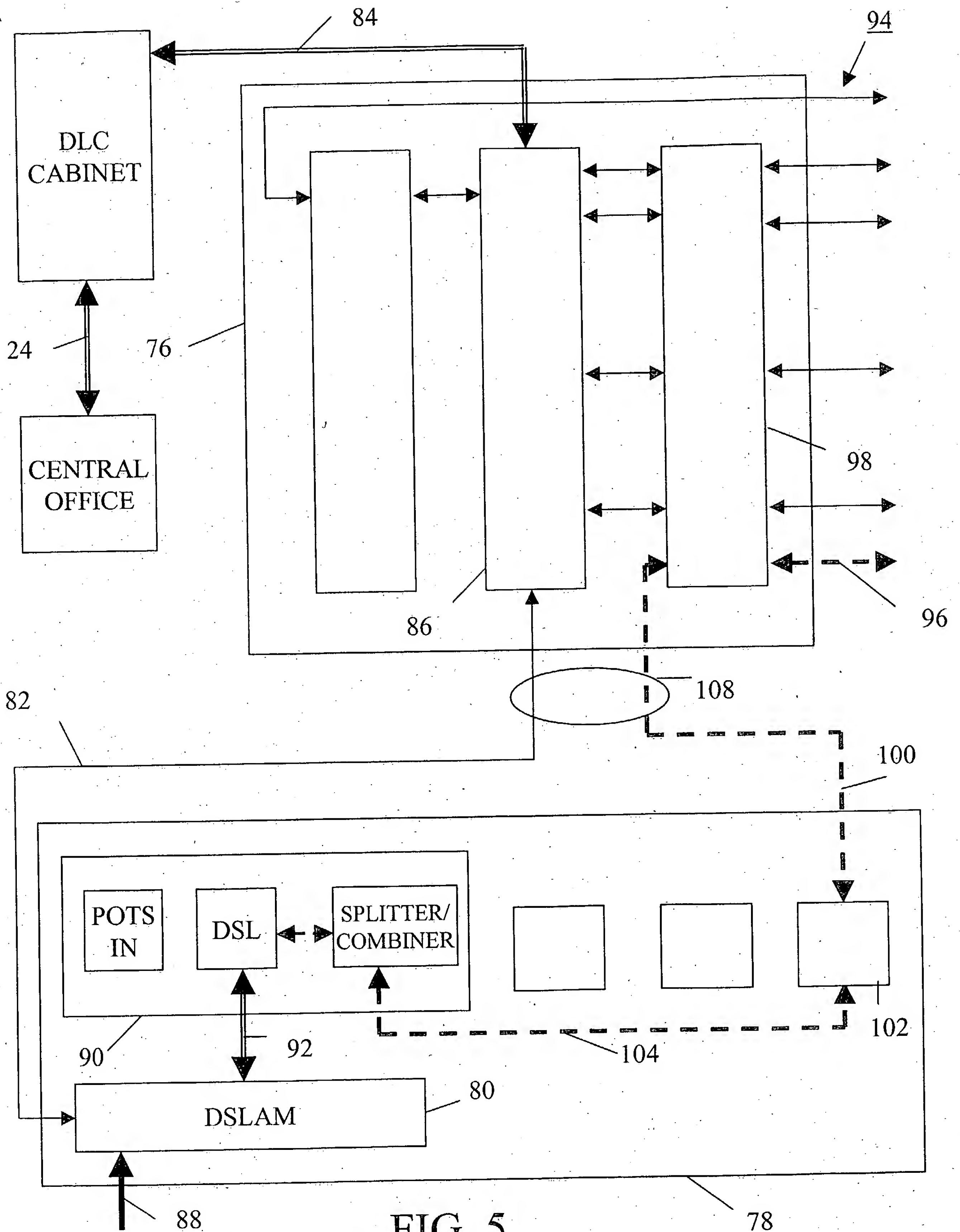


FIG. 5
(PRIOR ART)

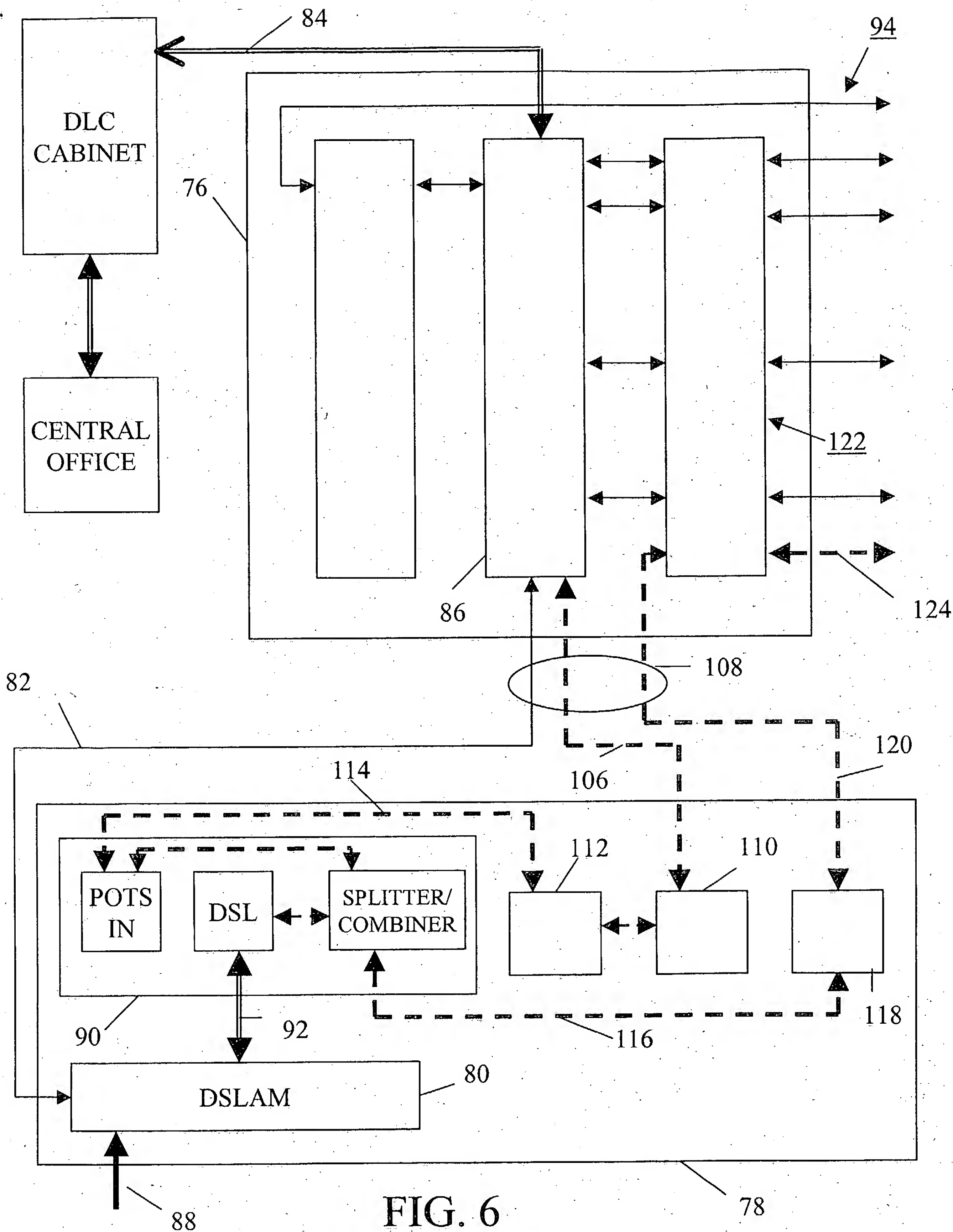


FIG. 6
(PRIOR ART)

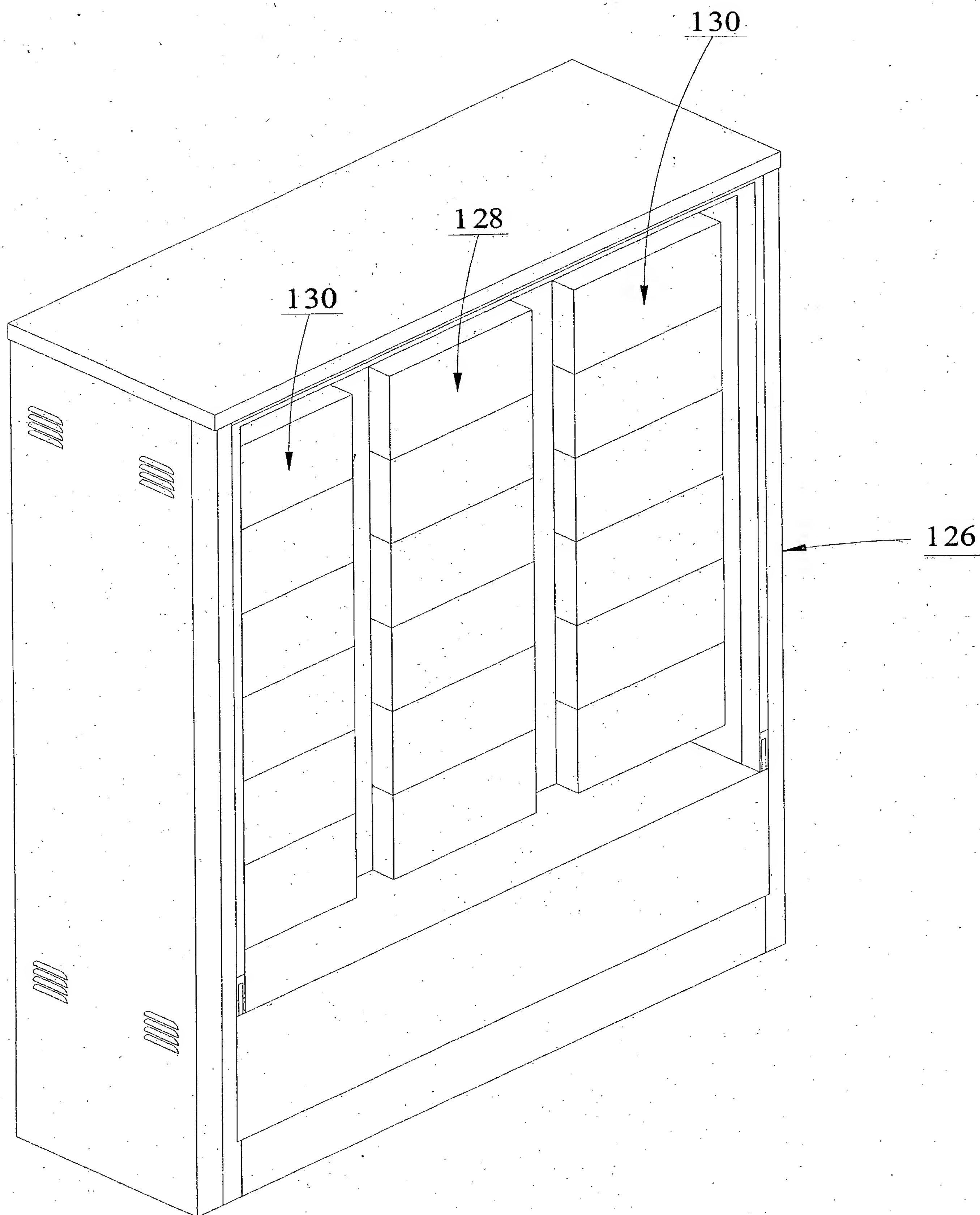


FIG. 7

12745 00003

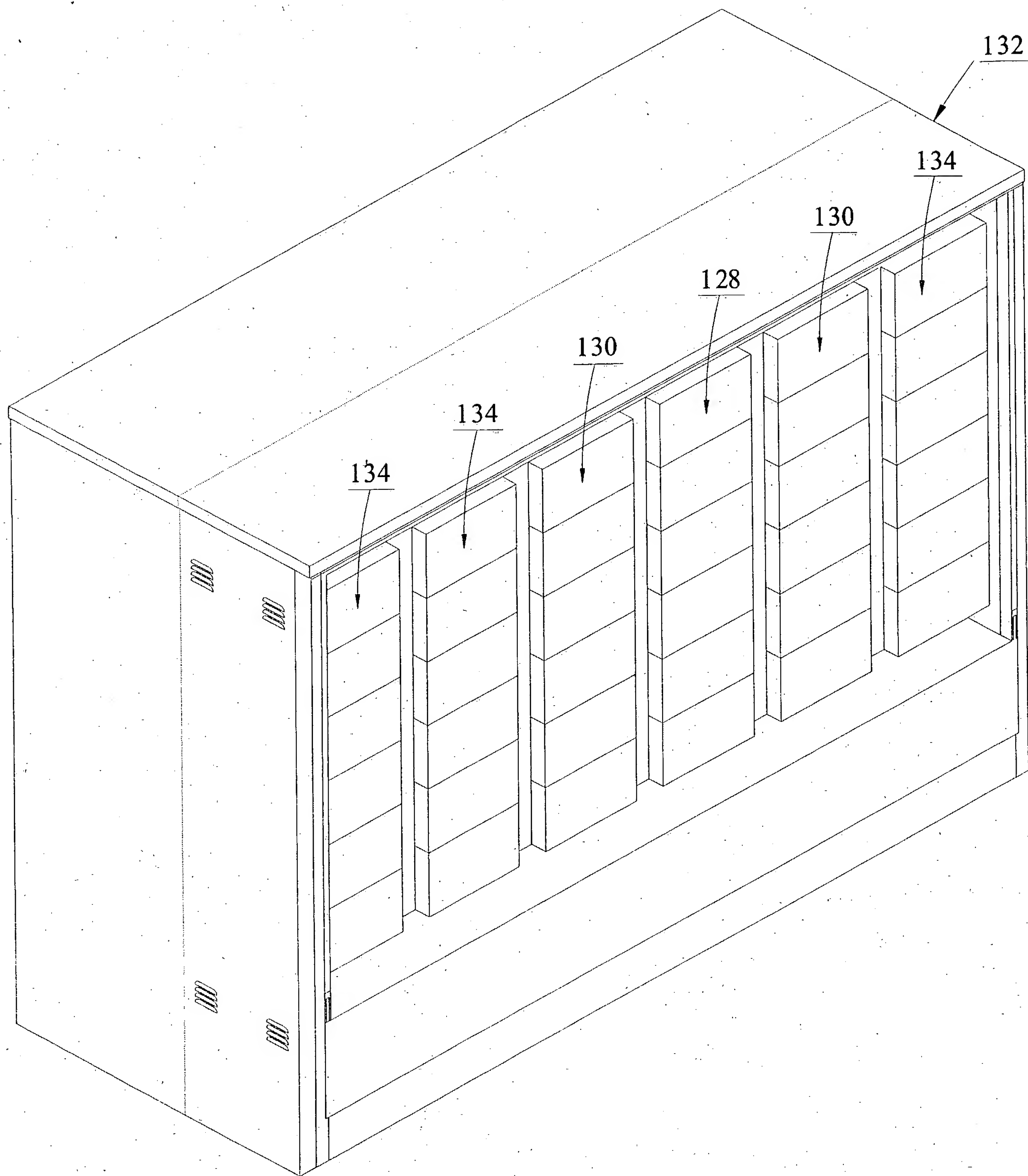


FIG. 8

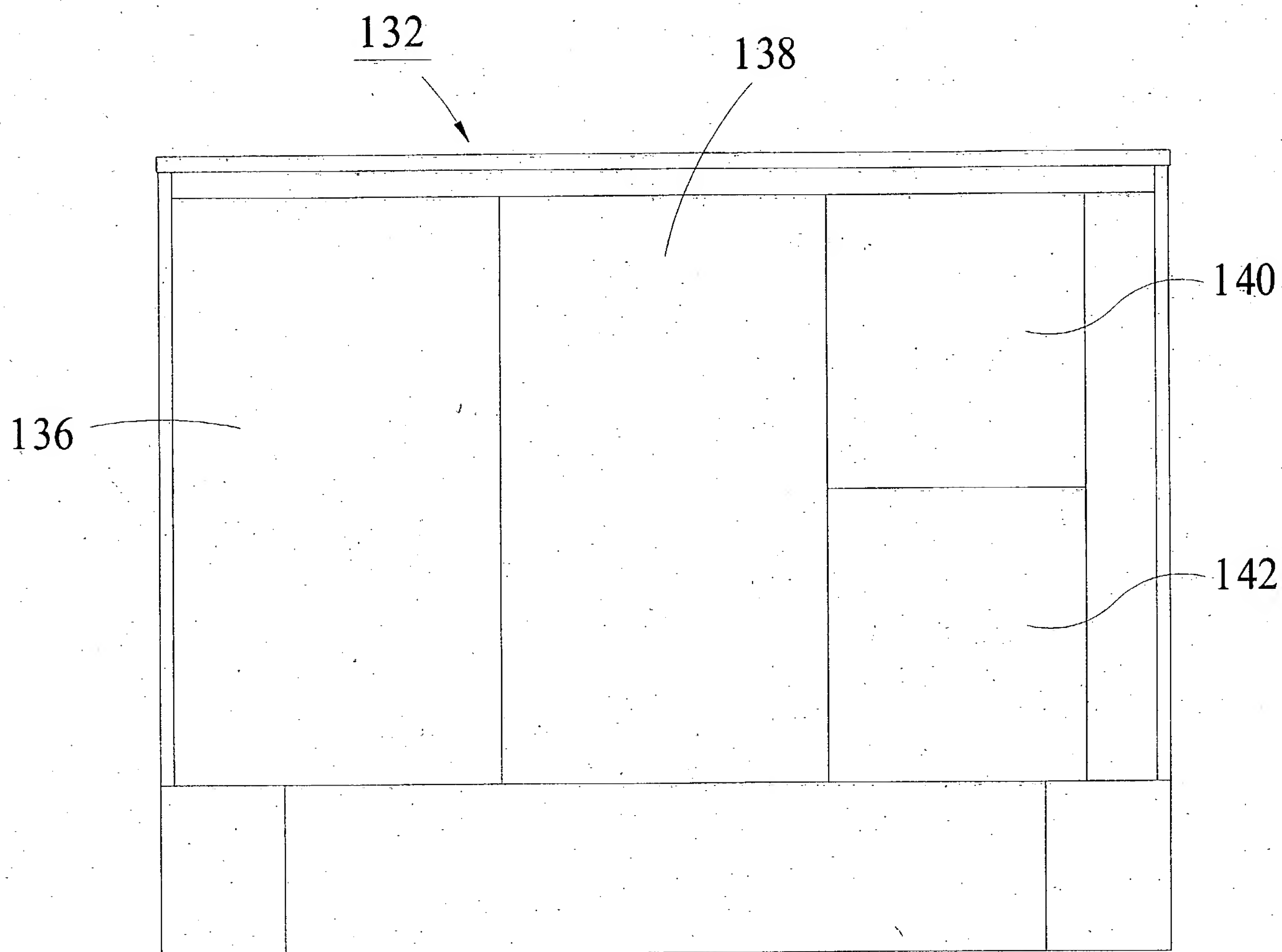


FIG. 9

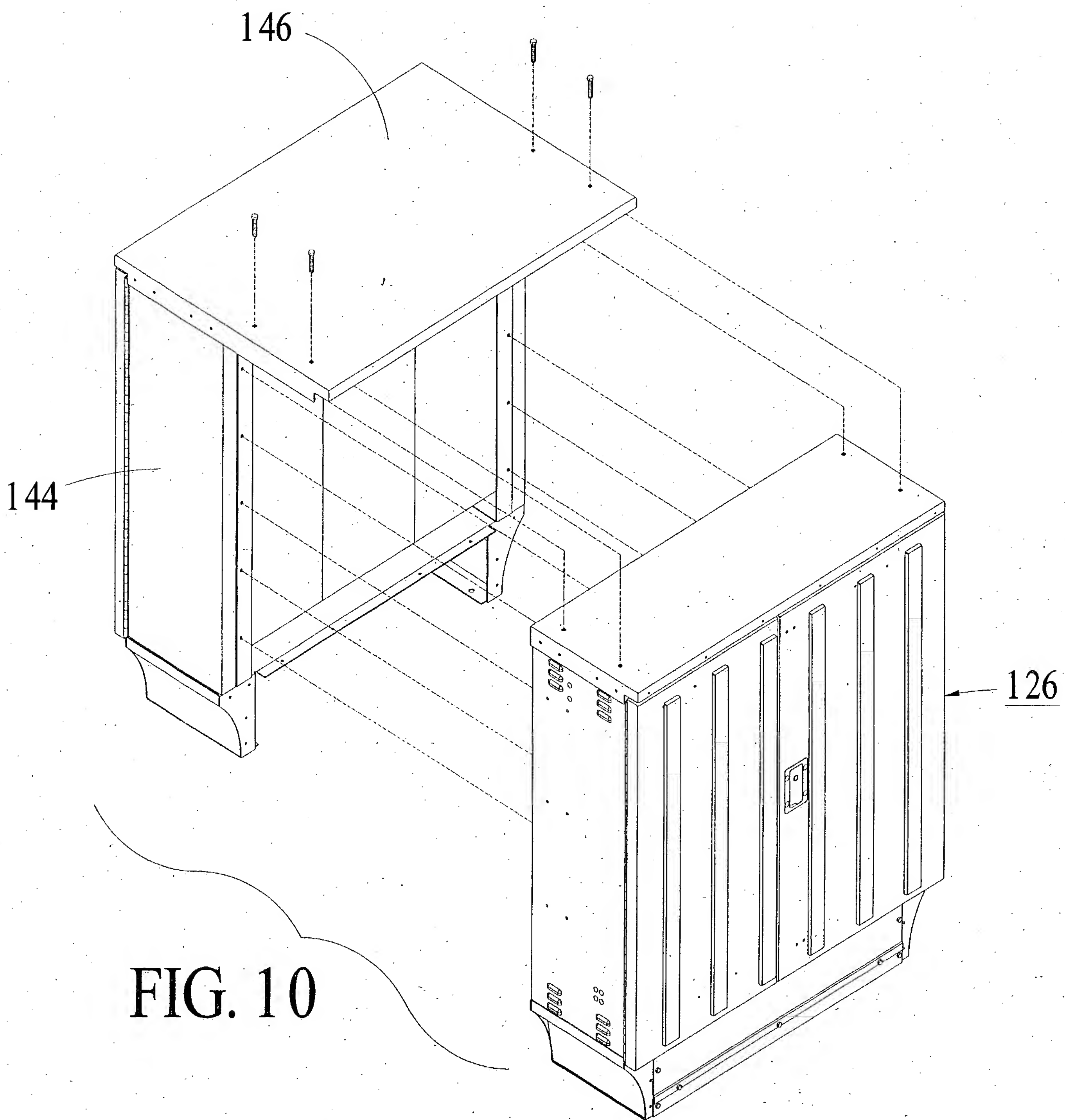


FIG. 10

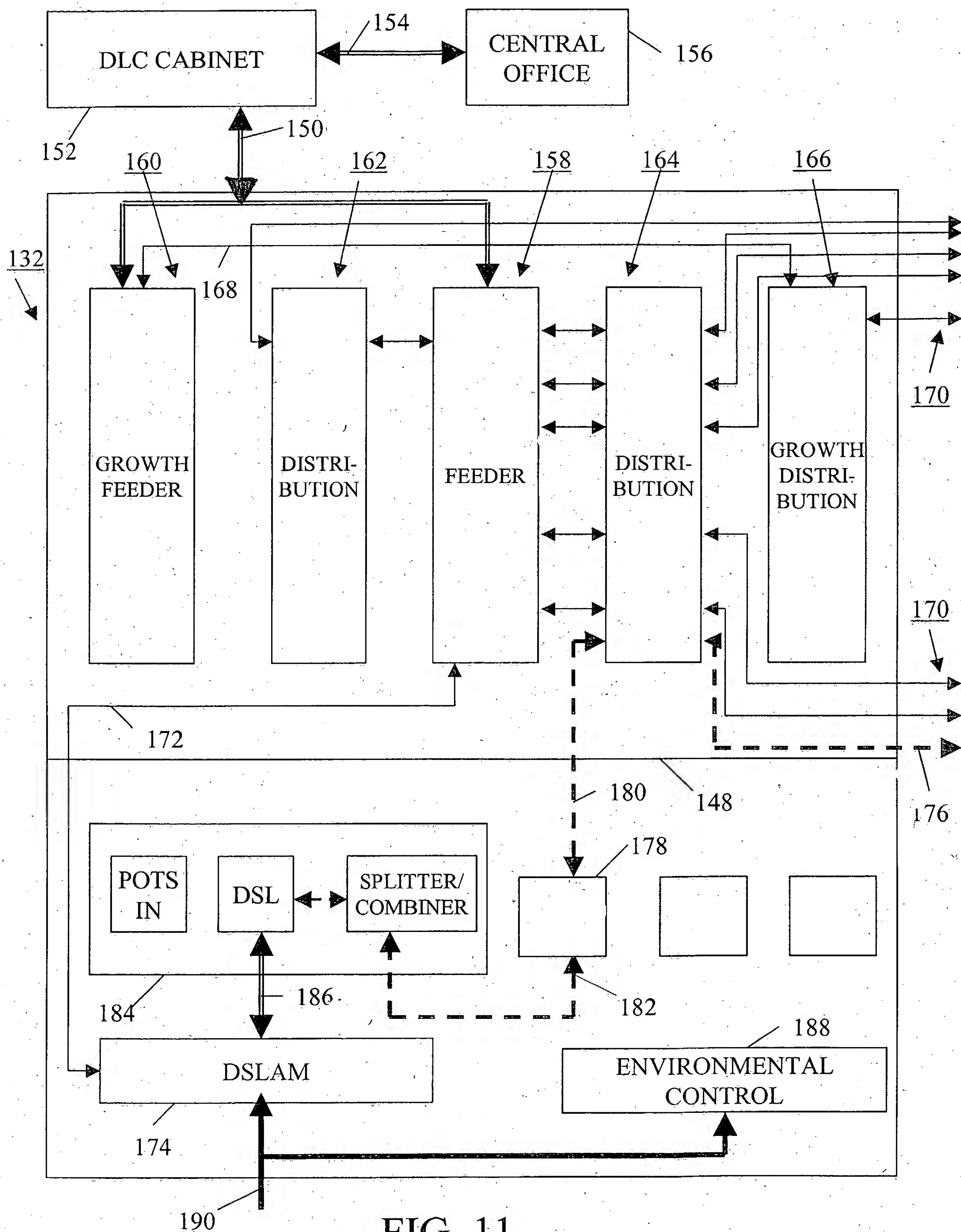


FIG. 11

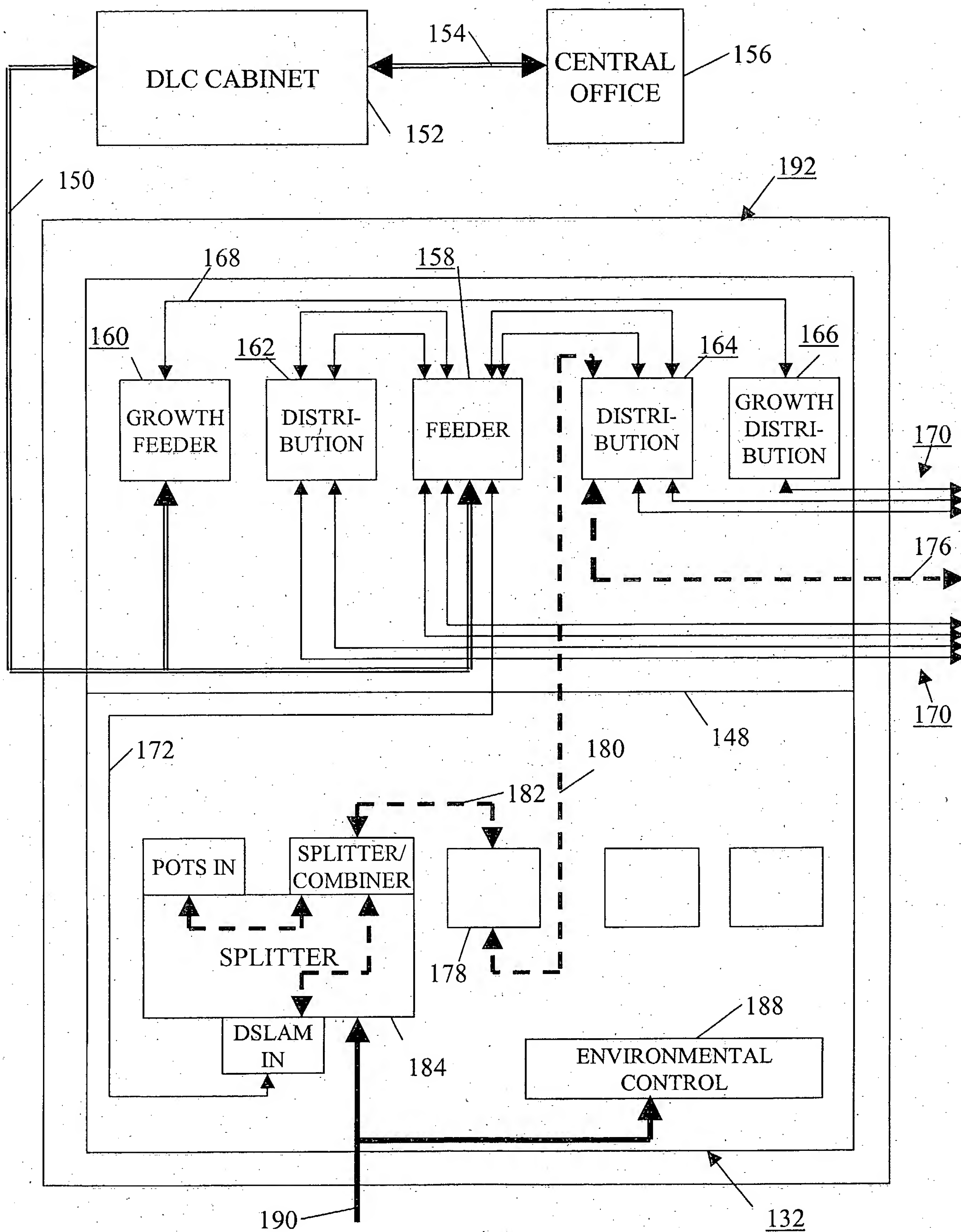


FIG. 12

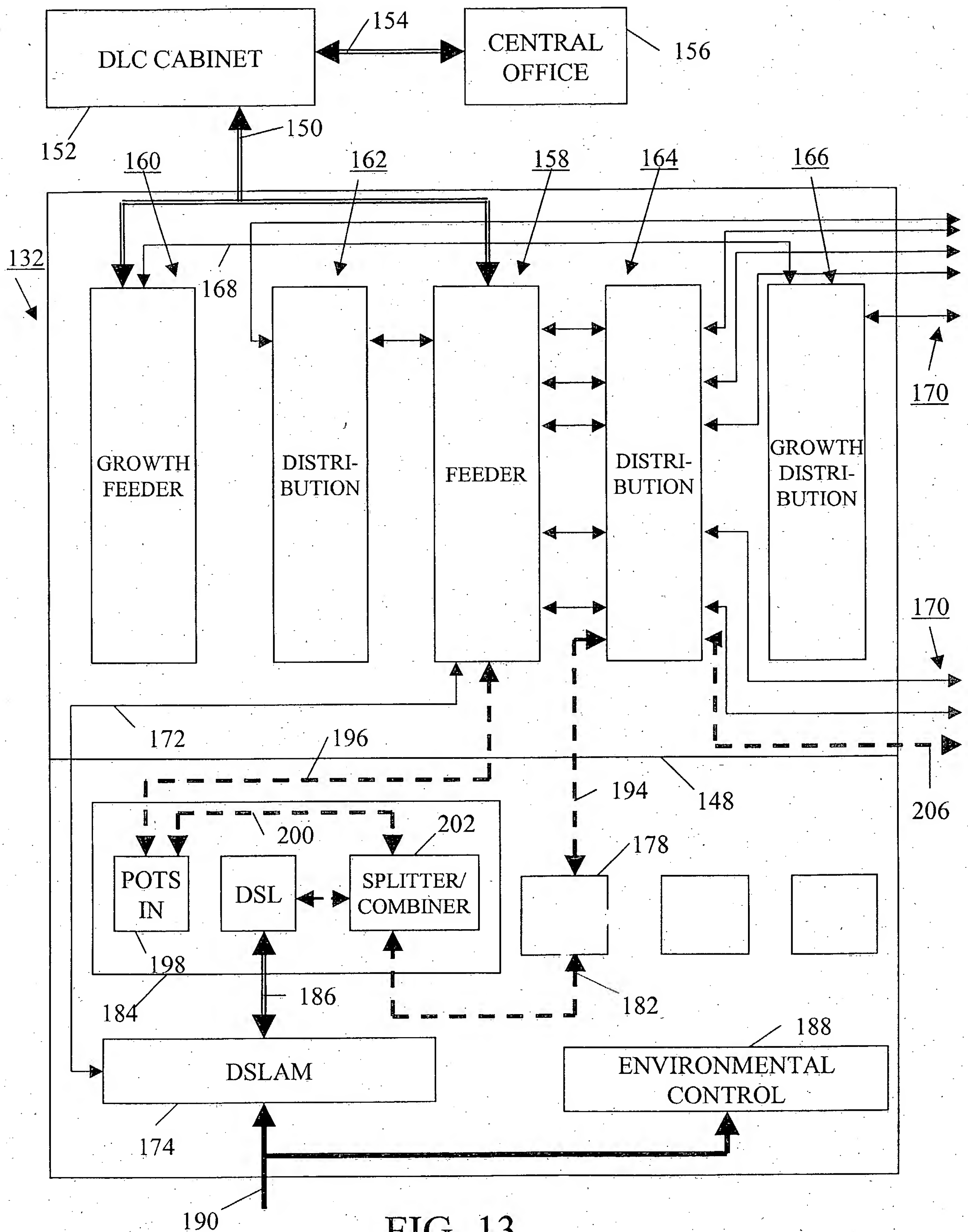


FIG. 13

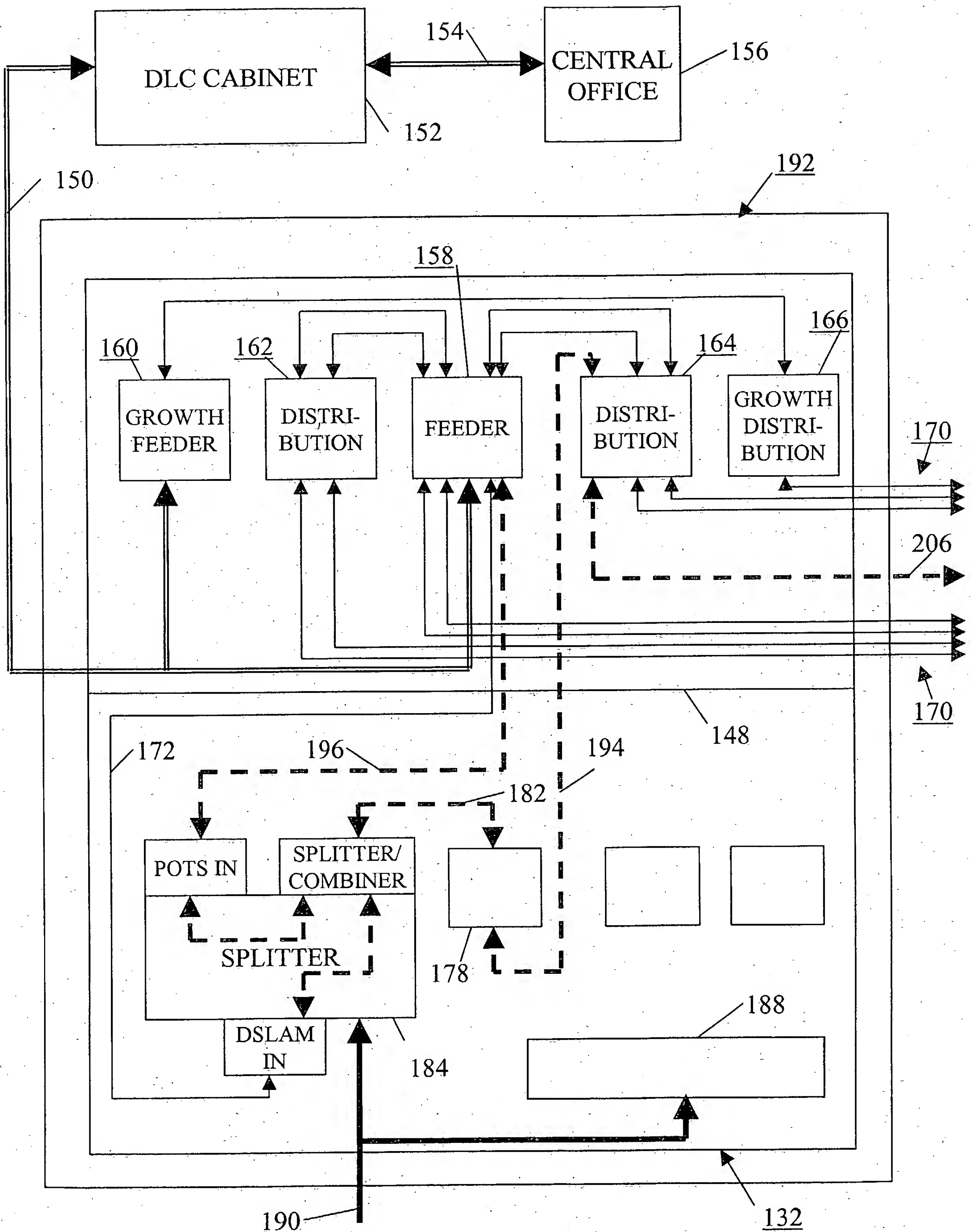


FIG. 14

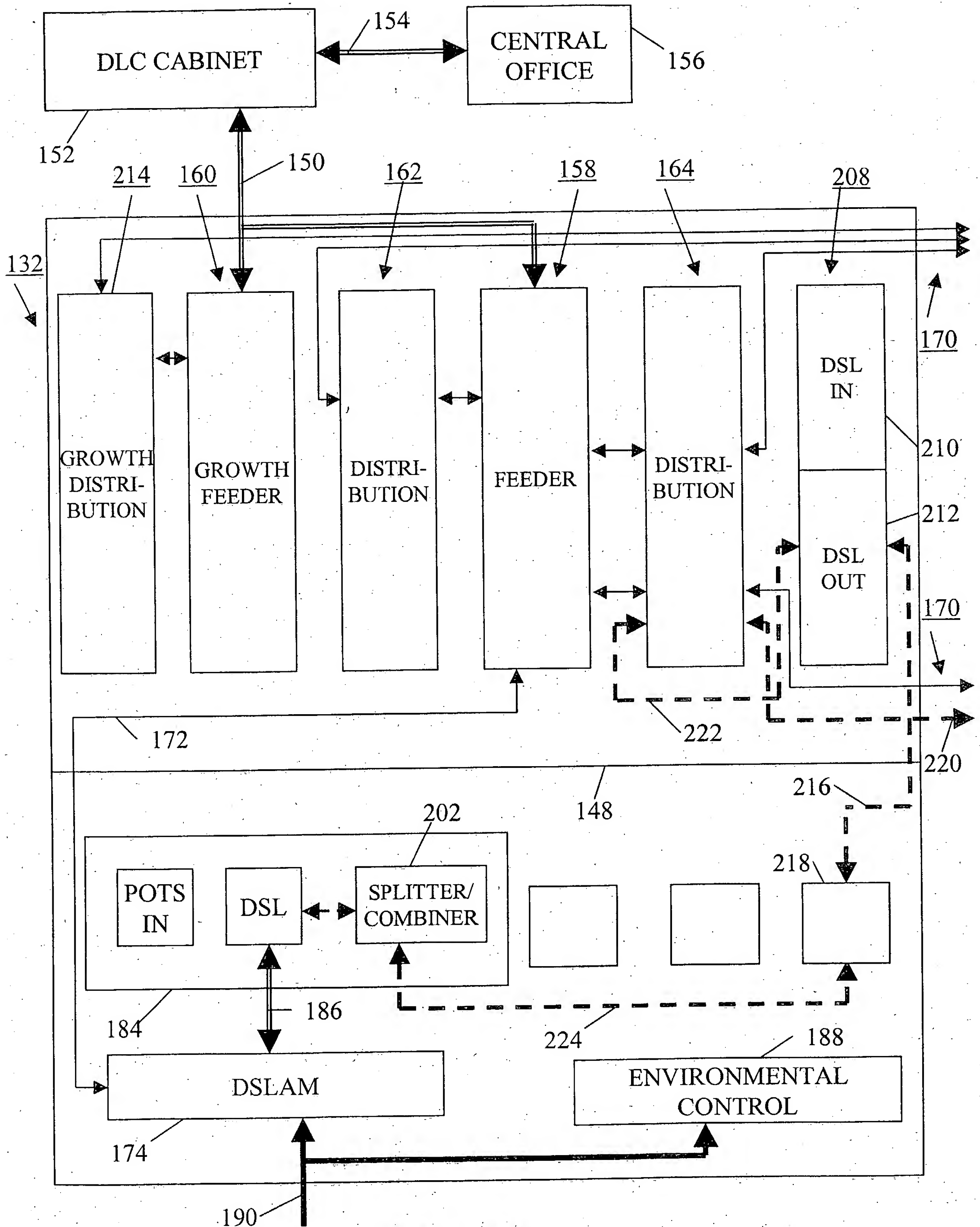


FIG. 15

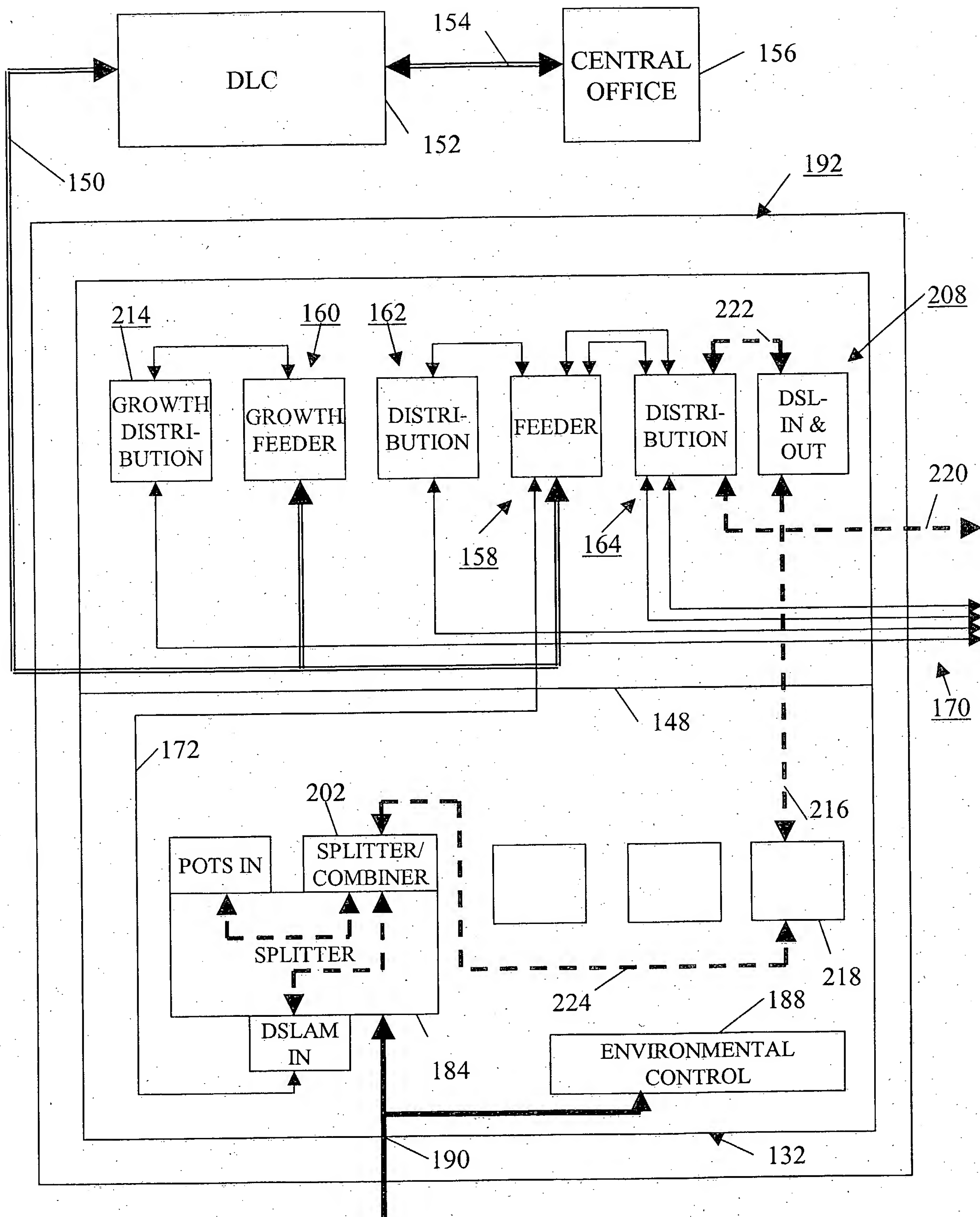


FIG. 16

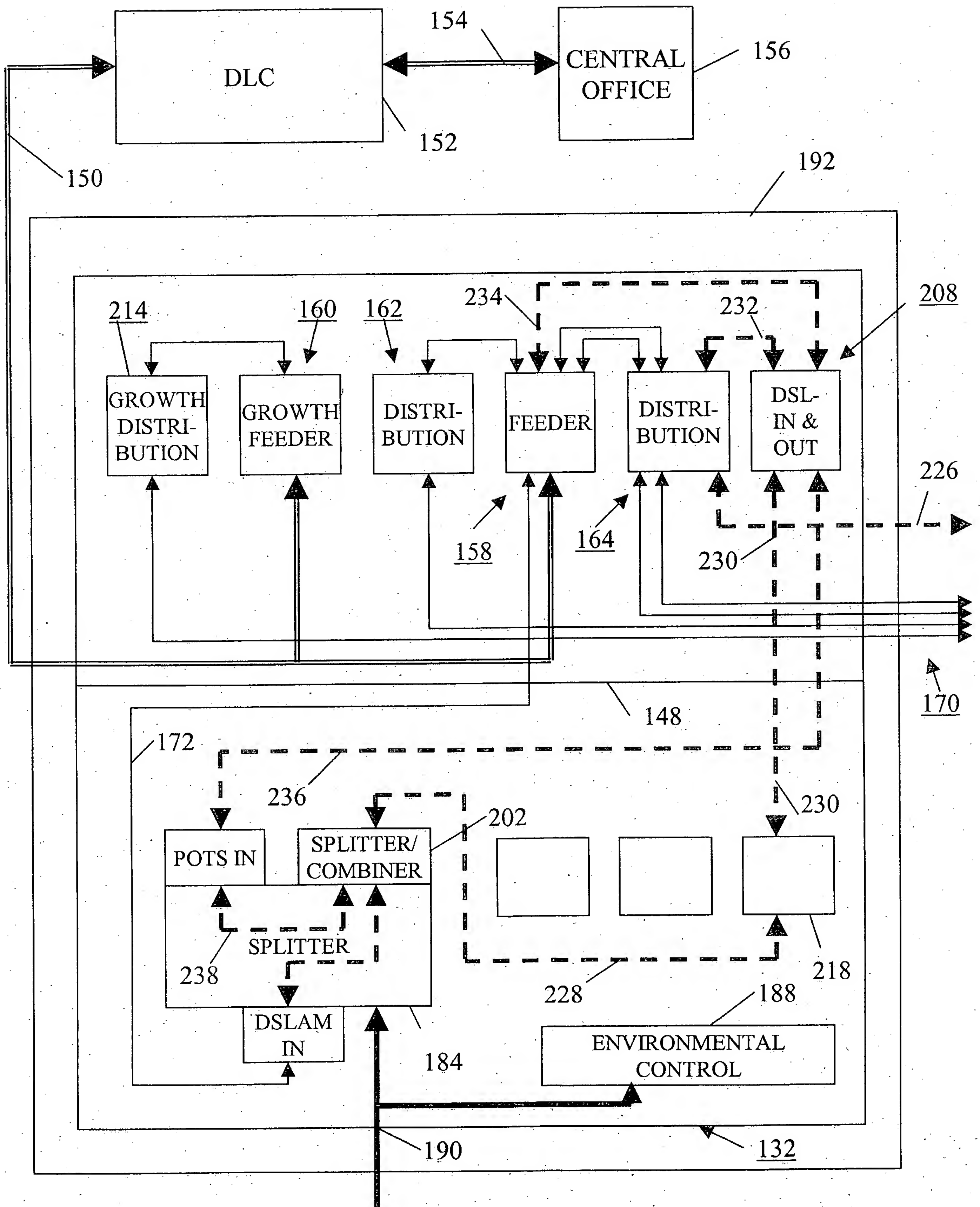


FIG. 18

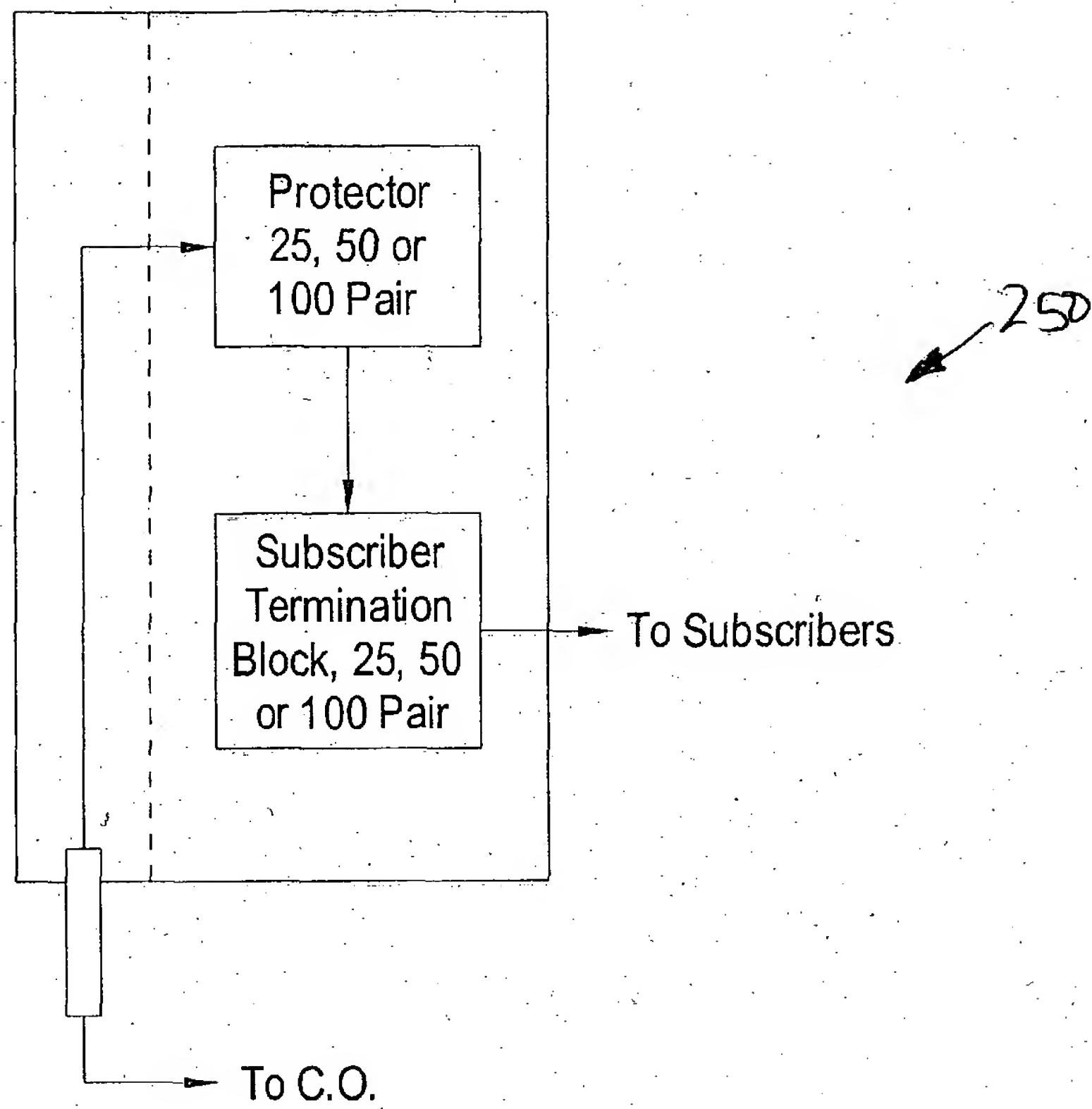


FIG. 19

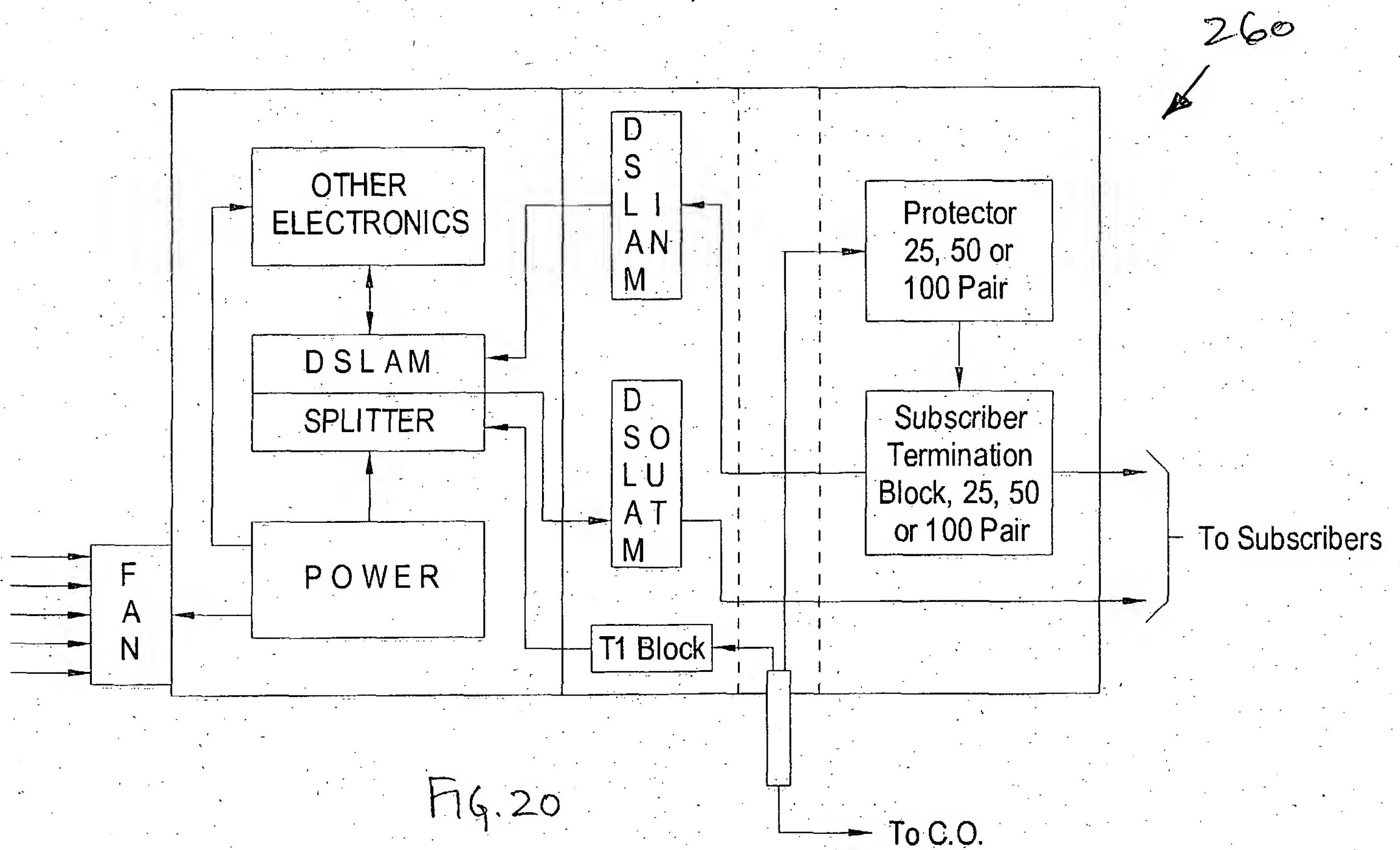


FIG. 20

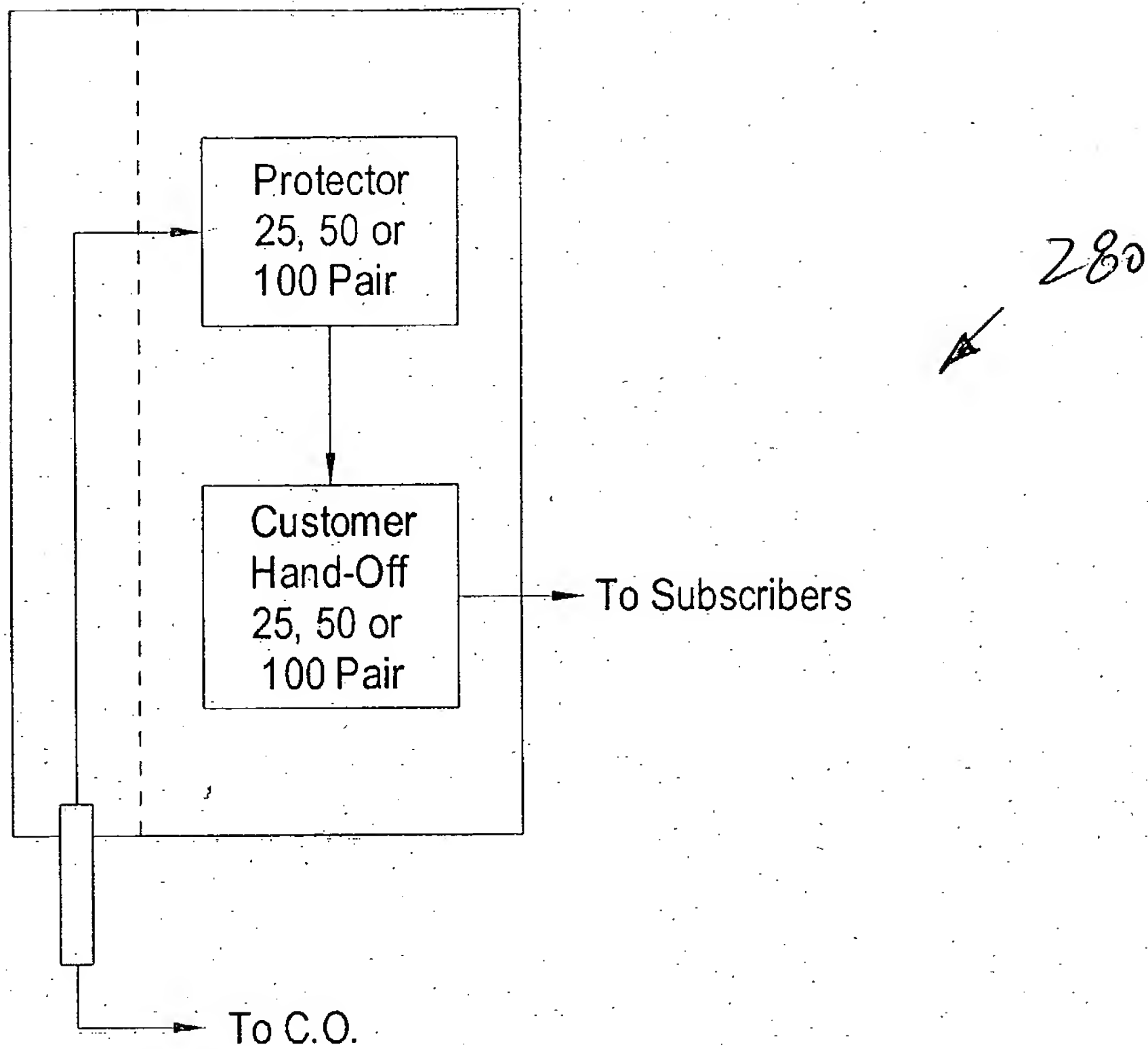


FIG. 21

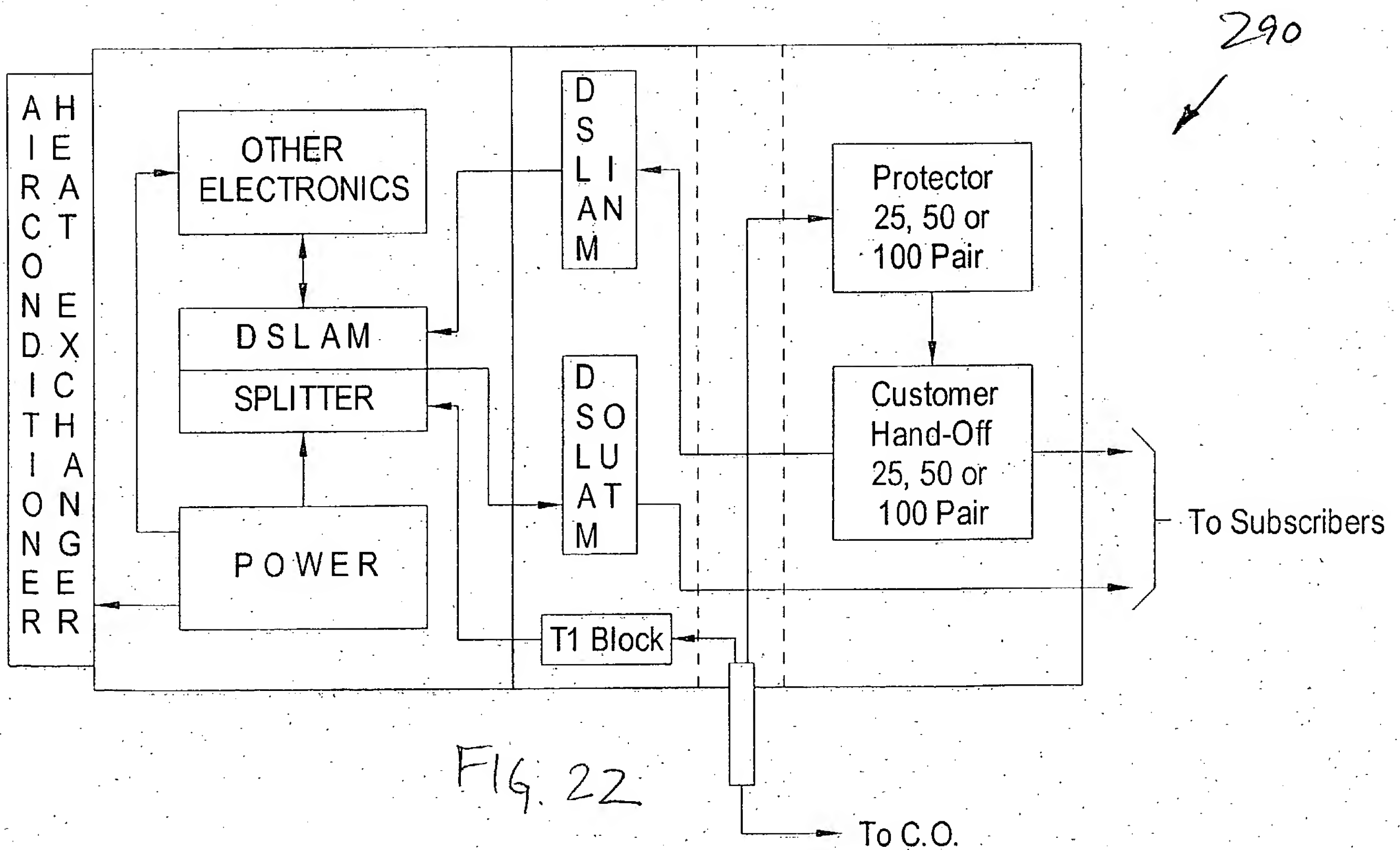
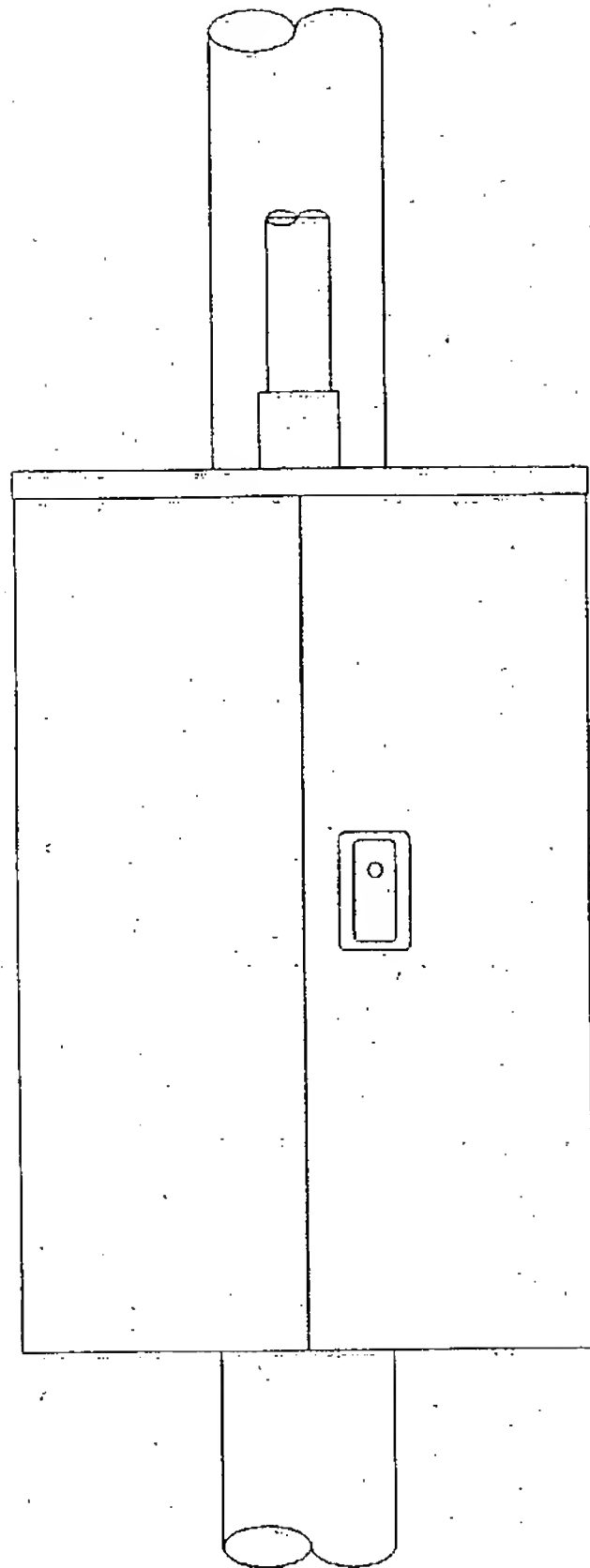
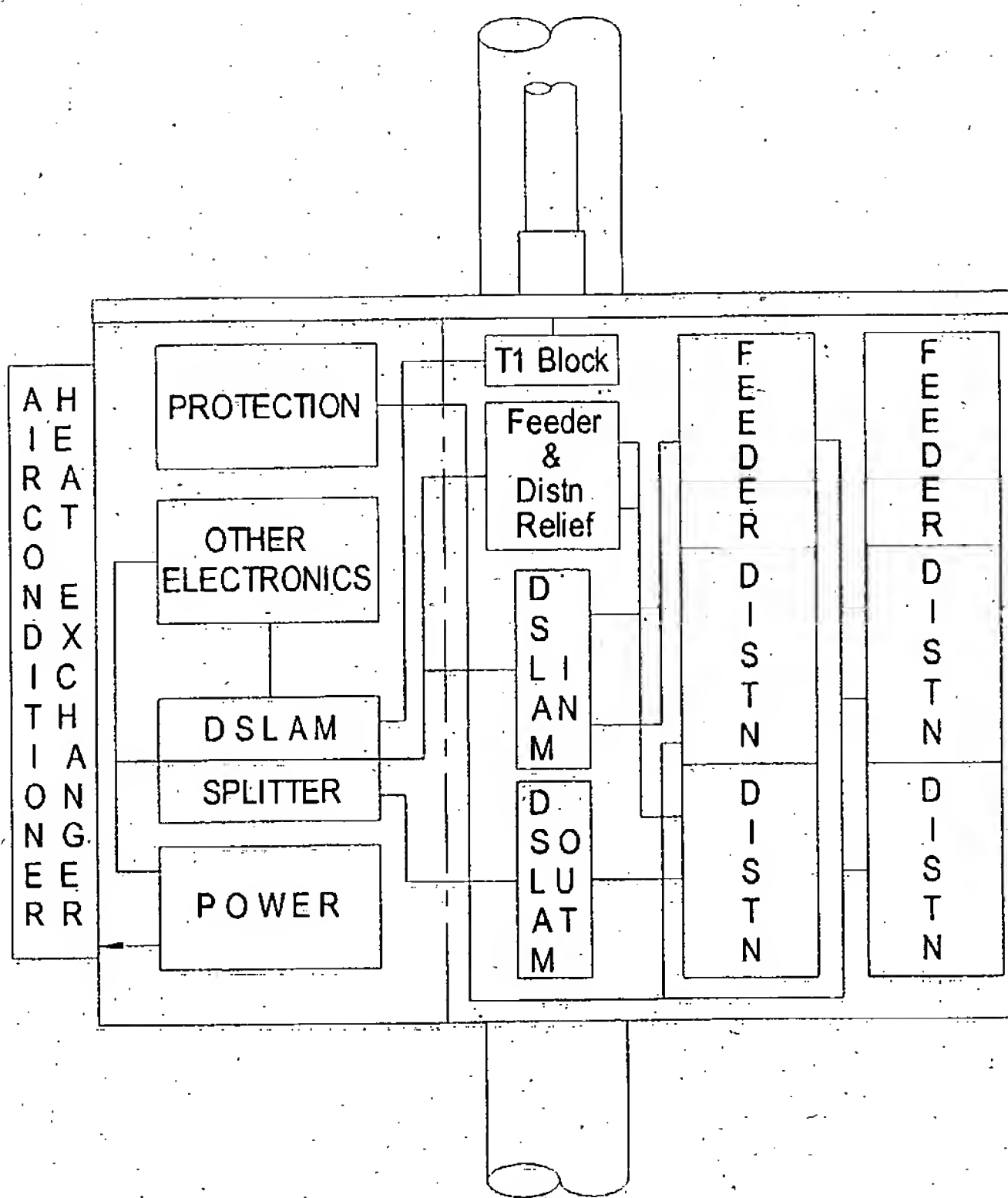


FIG. 22



310

FIG. 23



320

340
↓

Central Location for
Control & Monitoring

Air Conditioner &
Heat Exchanger
Control

Fan Control

Temperature
Sensing

Intrusion
Monitoring

CABINET
CONTROL CENTER
FUNCTIONALITY

Humidity
Sensing

ADSL2+
Diagnostics

Heater
Control

ADSL2+
Performance
Monitoring &
Control

Battery
Monitoring

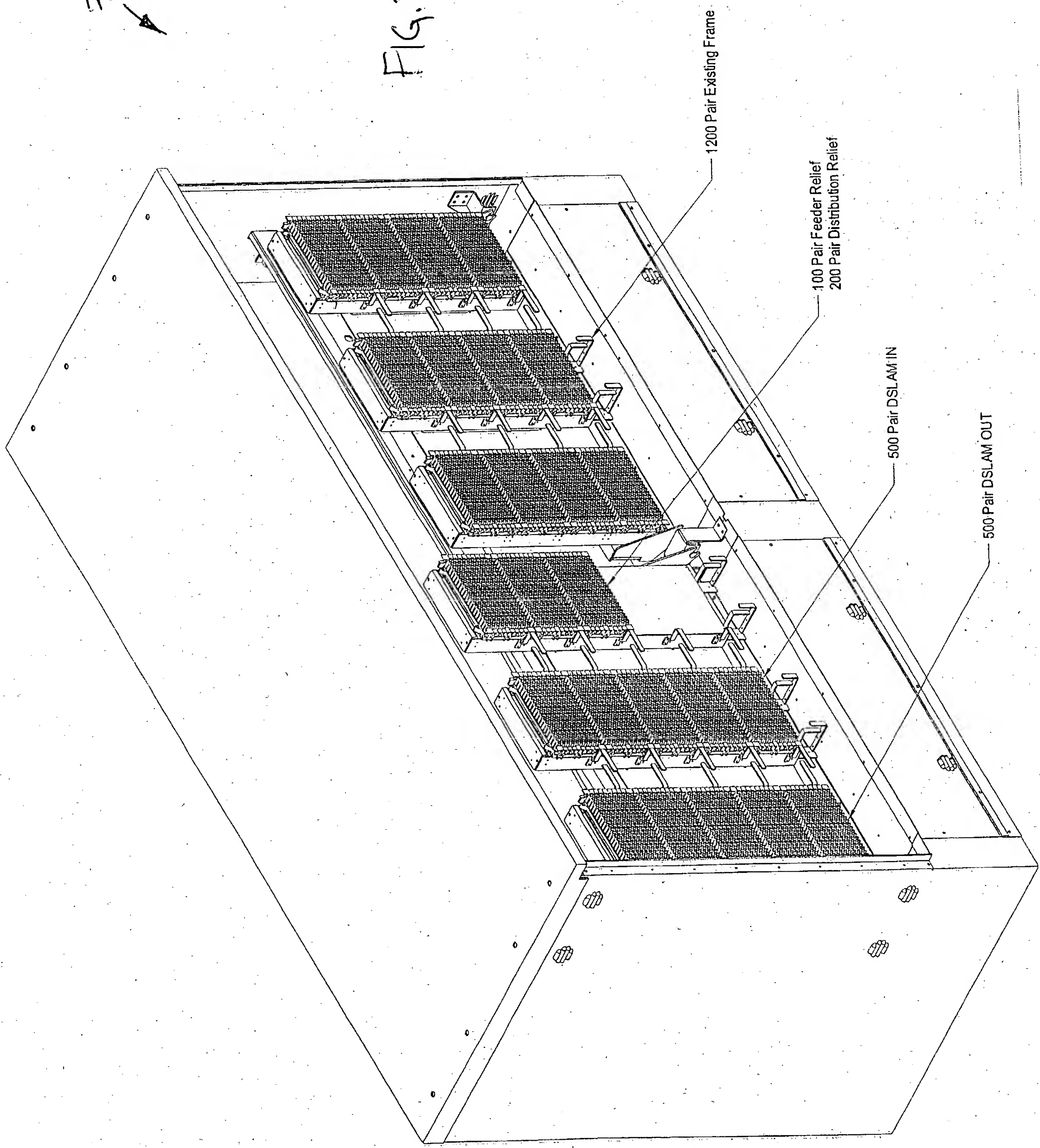
Performance Monitoring
of Backhaul Connection

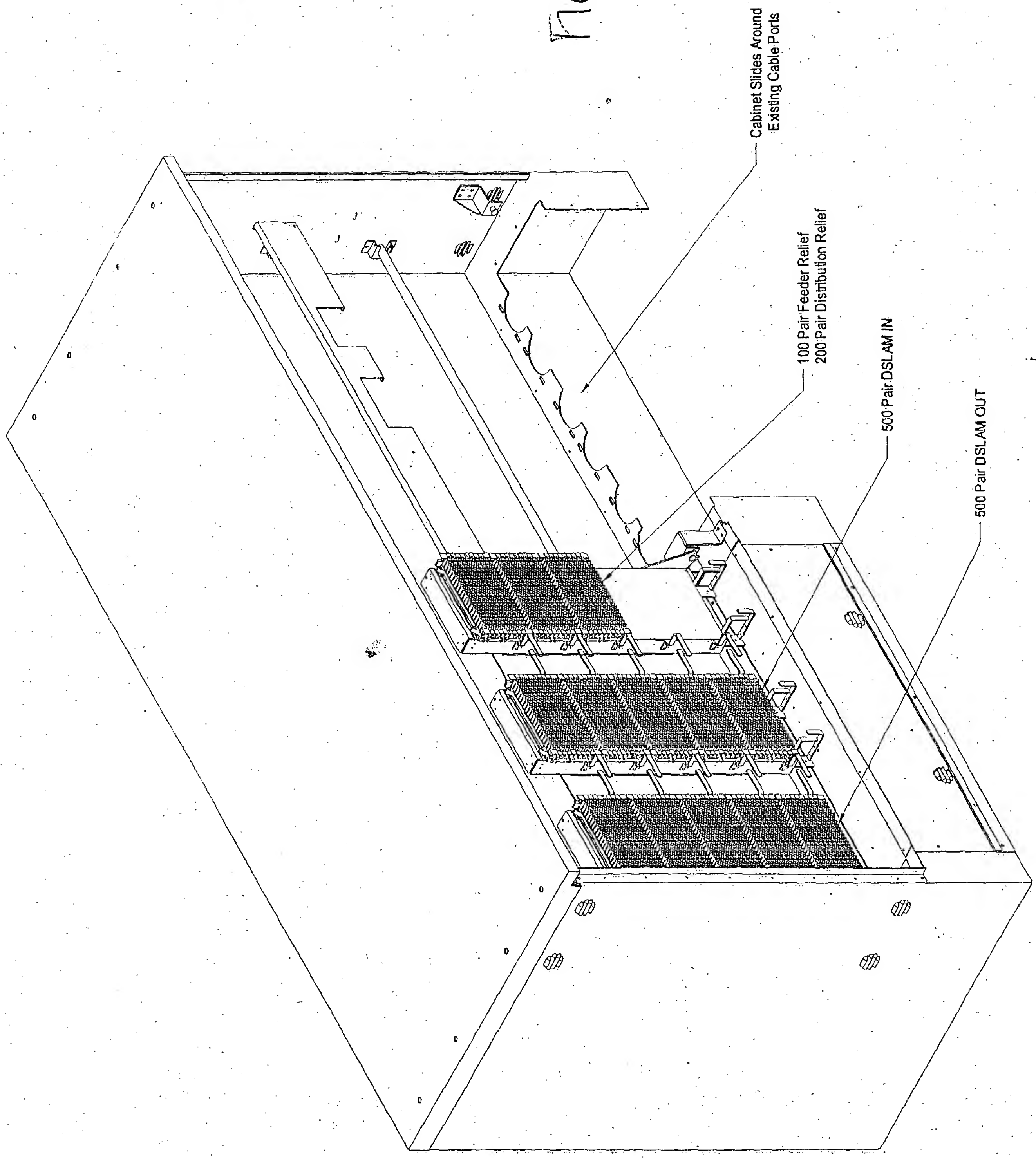
FIG. 25

360

FIG. 26

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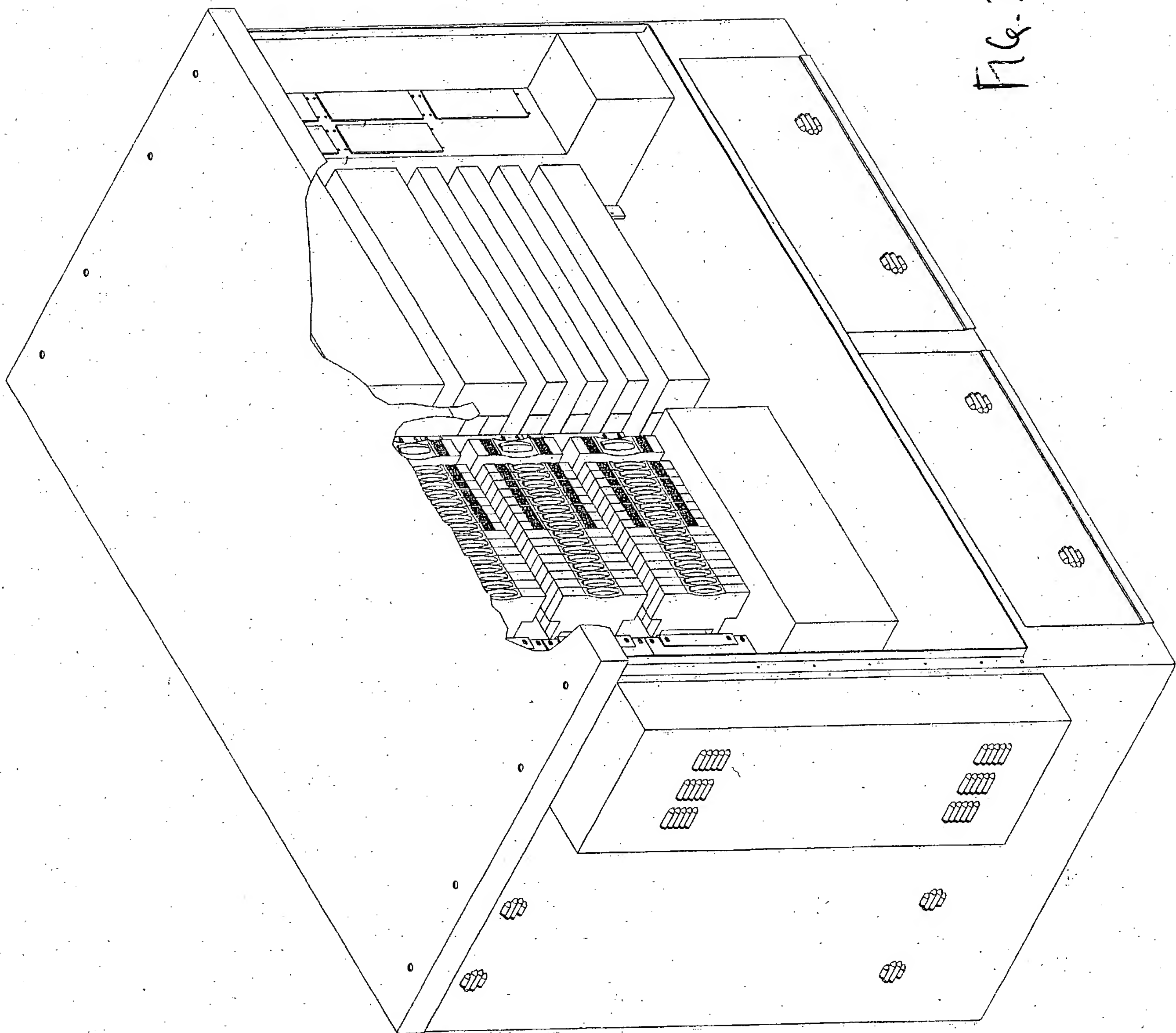




370

Fig. 27

123745.00003



380

Fig. 28

123745.00003

290

DC Power -
Standardized @ all RBOCs
and ILECs, 1 Req./Cabinet

Power Distribution Panel (PDP), Low Voltage Disconnect (LVD) -

It contains thermal magnetic breakers, GMT
fuses and an LVD. It is 3RU x 23". 1 Req./Cabinet

MRT, 36 or 48 Ports.
1 RU x 19" or 23", Mounted Vertically,
7 or 6 Req./Cabinet

250 Pair, 5-Pin, Gas
Tube Protector Field

Alarm Panel -
1 RU x 23". It collects all the house alarms on designated blocks which are
cross-connected on the same panel to designated alarm inputs. Wires can
be wire wrapped on back or connectorized. Cross-connects across the front
can be done in the factory or in the field. 1 is Req./Cabinet

Remote Monitoring Unit (RMU),
Req./Cabinet

Universal Management Aggregator (UMA). Returns alarm functions back to CO
via DS1. Requires a dedicated T1/HDSL transport to function.
Req./Cabinet

AC Load Center

DSX - 1 Panel. A low profile front cross-connect 56 pair unit (28 A&B).
24 of the "A" side go to both shelves. 16 of the "B" side go to the MRT.
Another slot is assigned to the UMA
1 Req./Cabinet

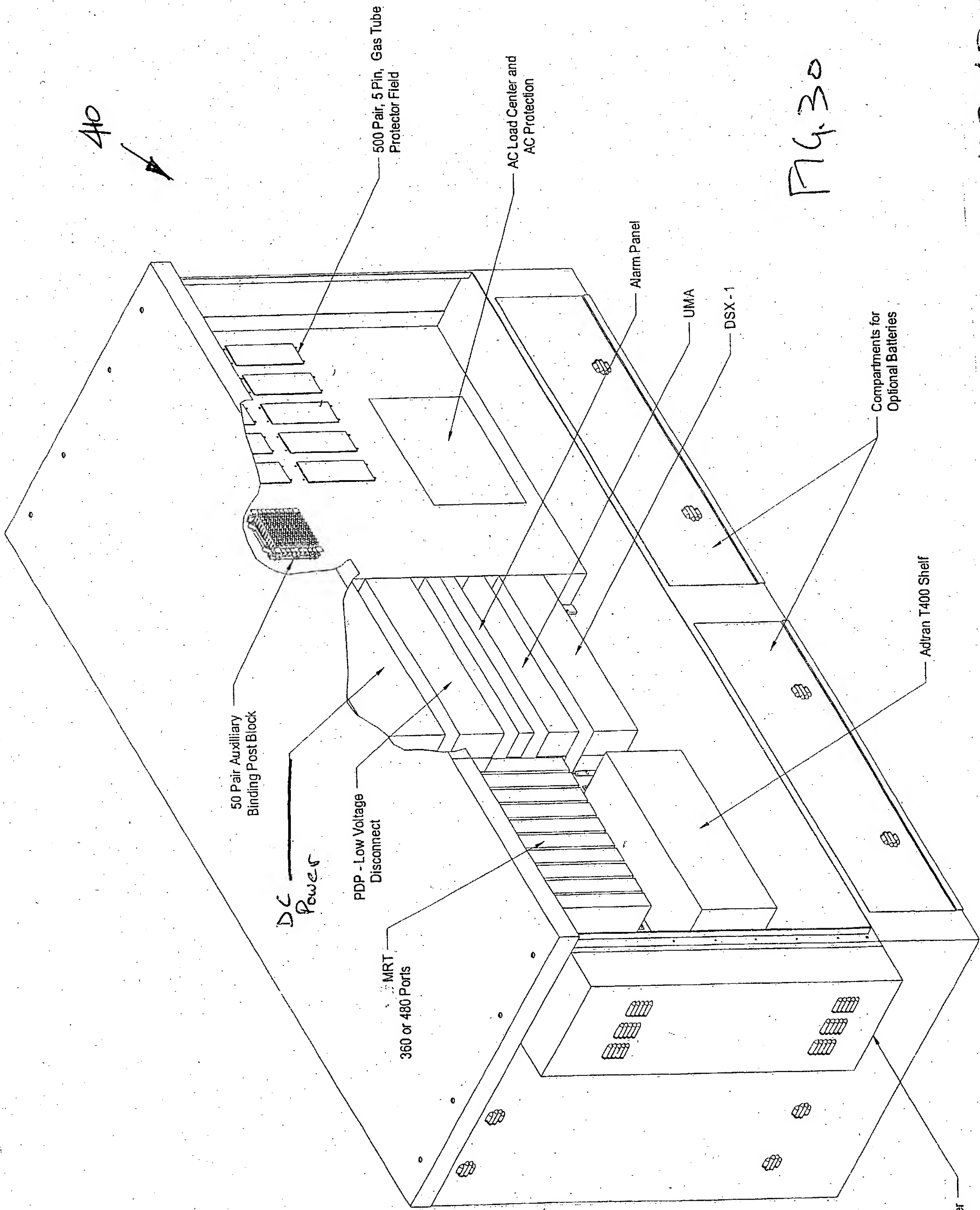
Optional Battery Compartment Drawers

Heat Exchanger

Shelves. This the Customer Premise Equipment (CPE)
transport to DS1 conversion platform. Each shelf holds 12 cards
of either 200 /400 mechanics. Each shelf is 3RU x 23". 2 Req./Cabinet

Fig. 29

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410

DC Power

50 Pair Auxiliary Binding Post Block

PDP - Low Voltage Disconnect

MRT 360 or 480 Ports

500 Pair, 5 Pin, Gas Tube Protector Field

AC Load Center and AC Protection

Alarm Panel

UMA

DSX-1

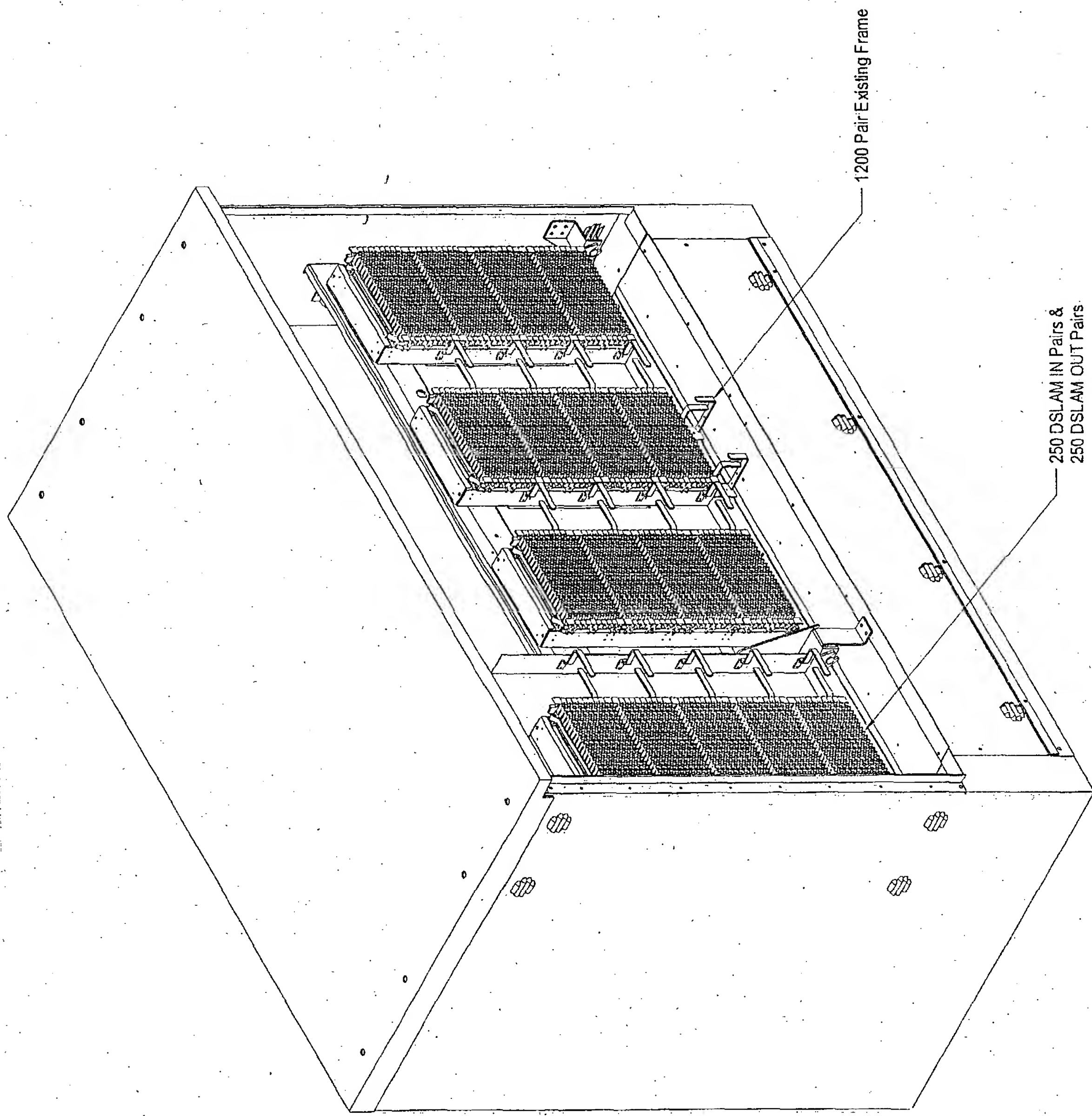
Compartments for Optional Batteries

Adtran T400 Shelf

Air Exchanger

Fig. 30

123745.00003



430

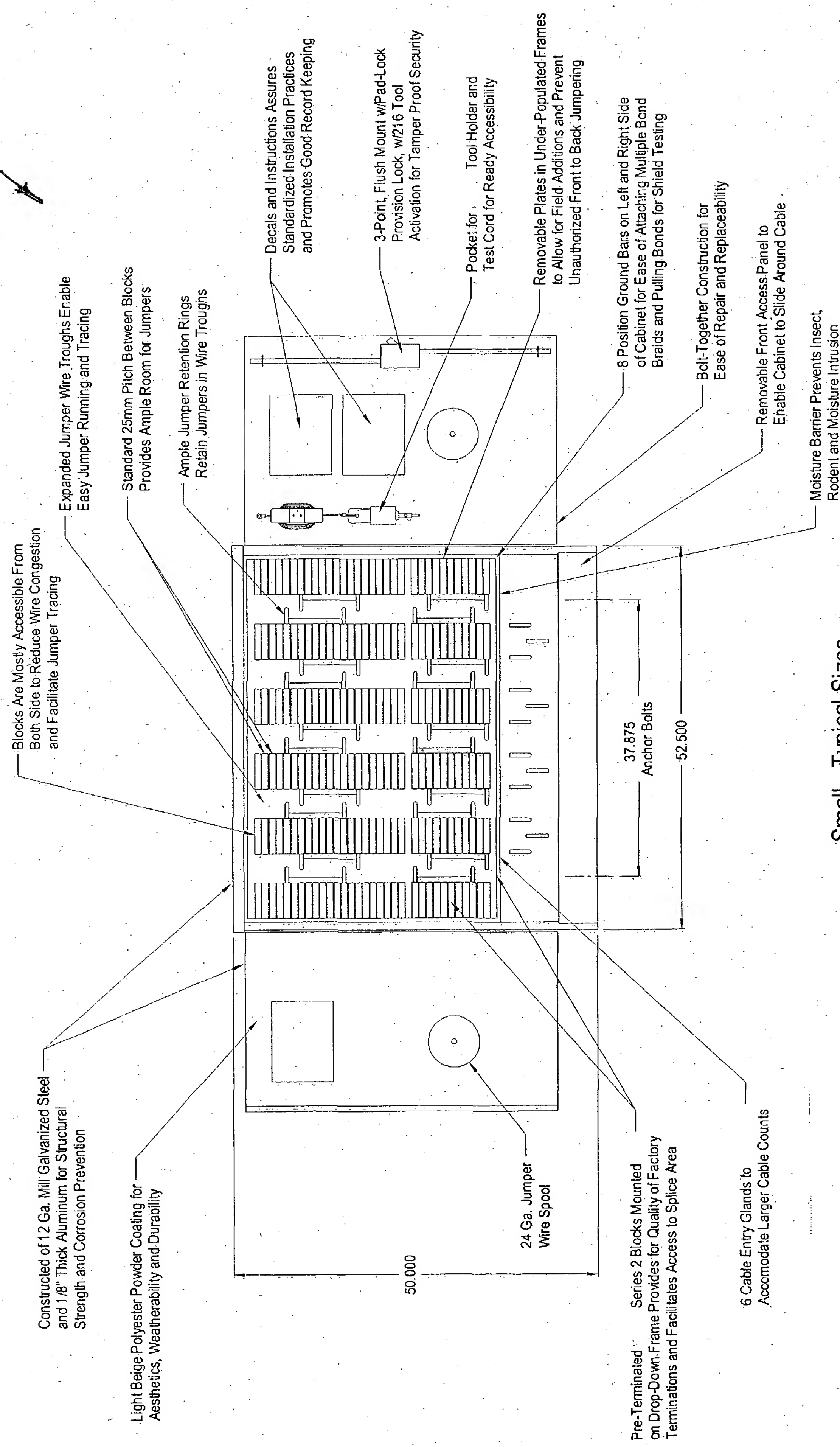
Fig. 31

1200 Pair Existing Frame

250 DSLAM IN Pairs &
250 DSLAM OUT Pairs

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440

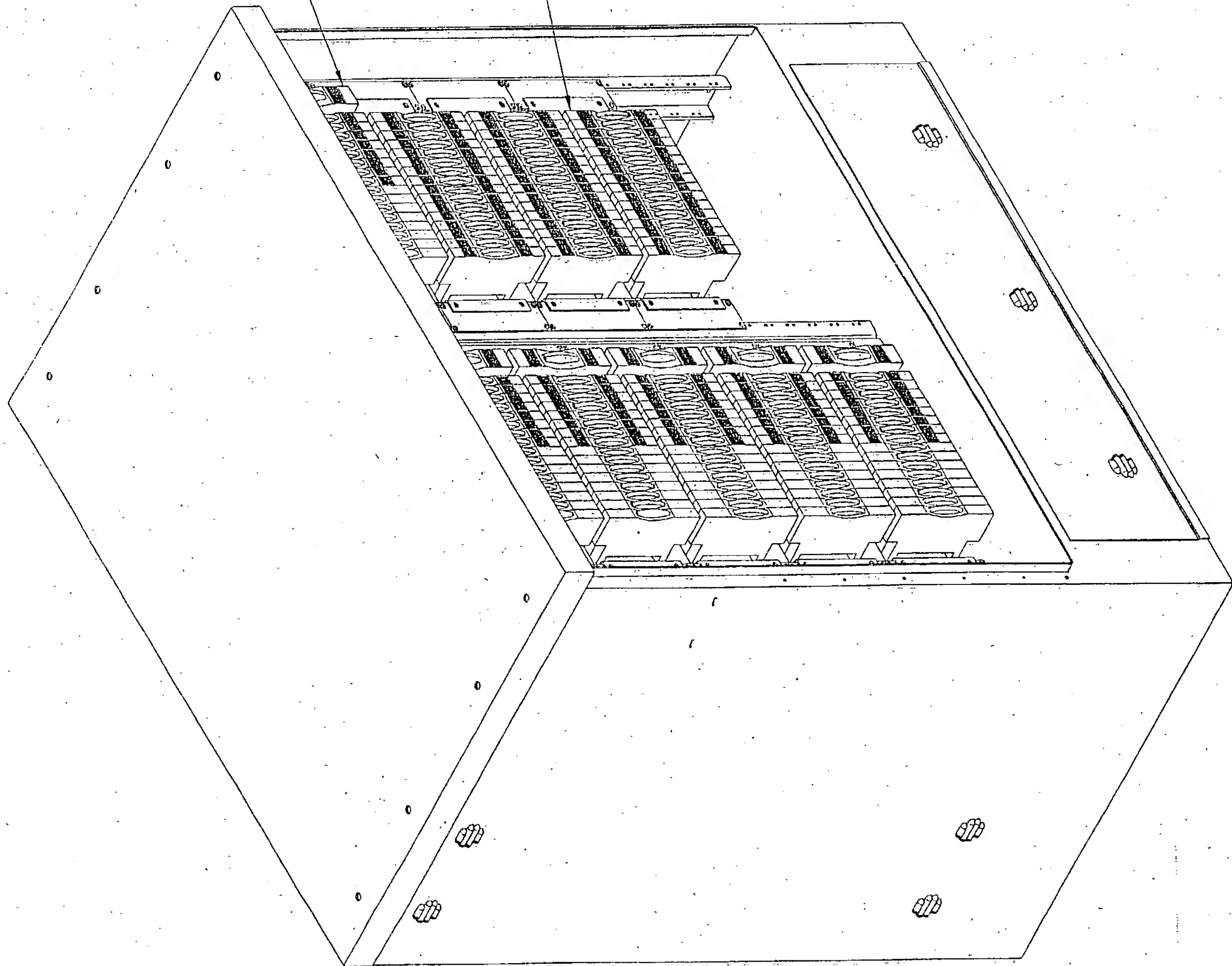


Small - Typical Sizes
 800, 1000 & 1200 PG/450 ADSL
 Max, 1200 PG/600 ADSL Single Sided
 Size ~50.000"H x 52.500"W x 20.000"D

Fig. 32

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460

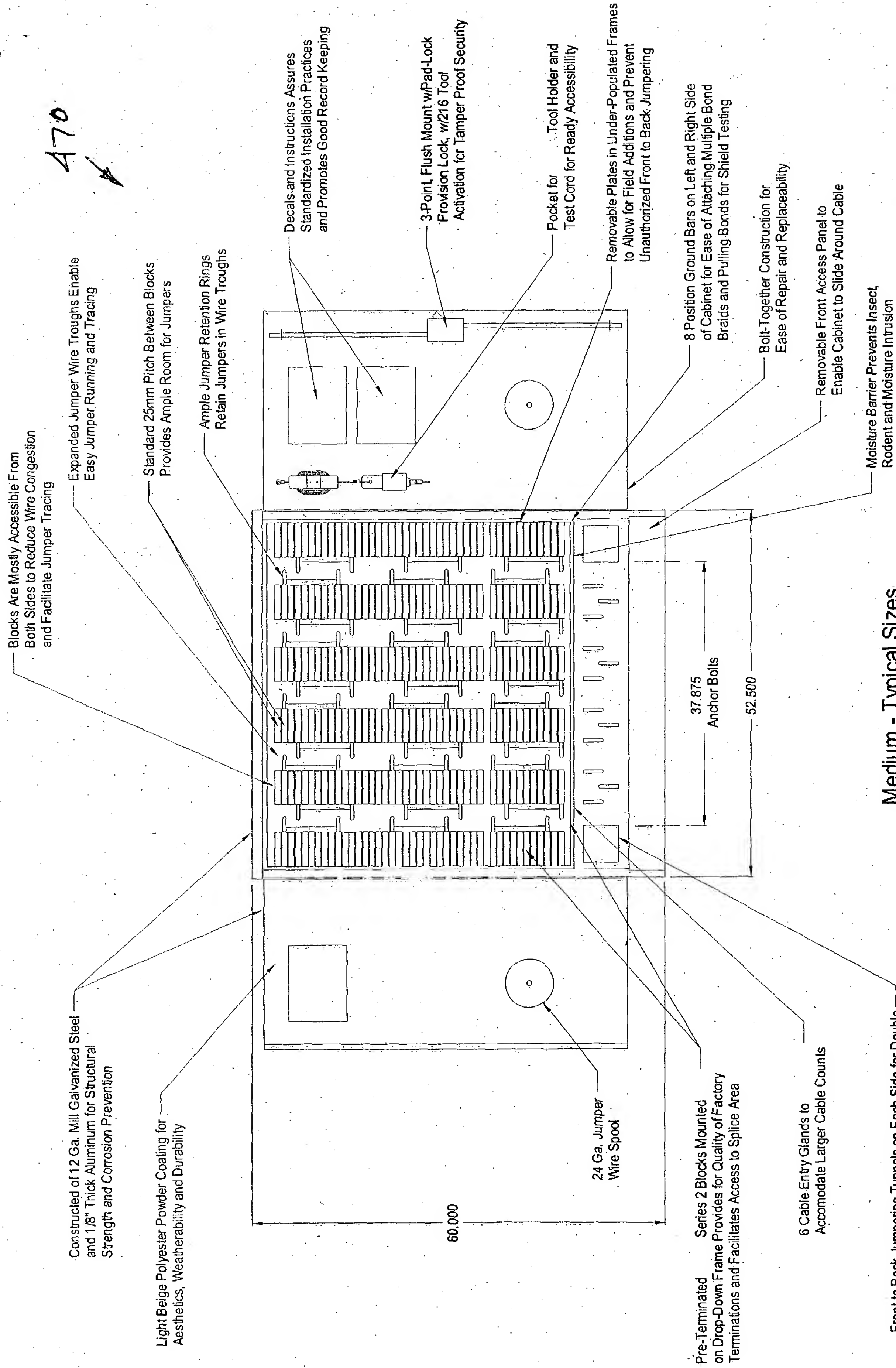


48 EDN110 IP DSLAMs
48 EDF110p POTS Filters
6 ESN108 Power over Ethernet (PoE)

48 EXN104 Ethernet to E1 Converter

FIG. 33

123745-00003

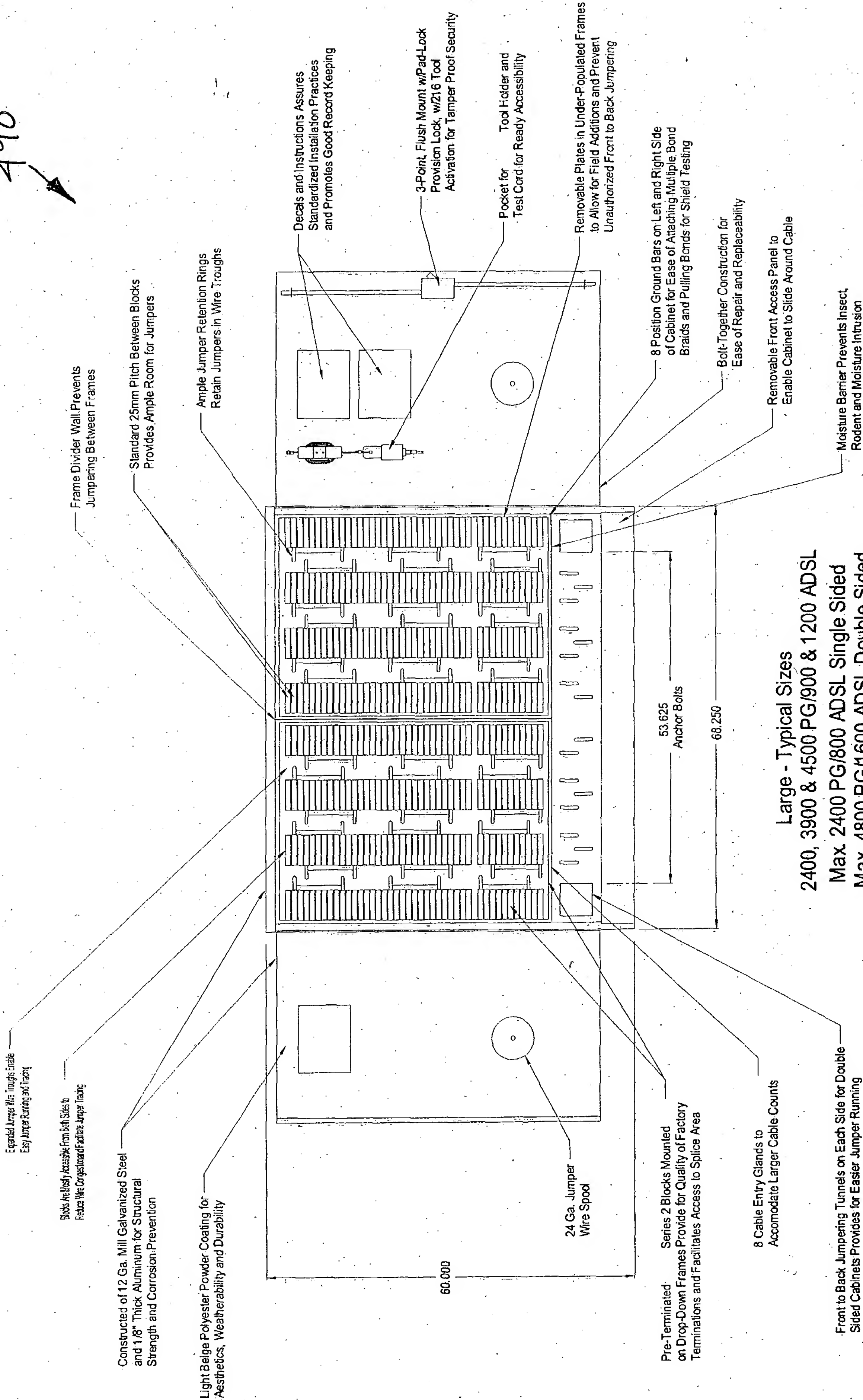


Medium - Typical Sizes
 1400, 1600 & 1800 PG/450 & 900 ADSL
 Max 1800 PG/600 ADSL Single Sided
 Max 3600 PG/1200 ADSL Double Sided
 Size ~60.000"H x 52.500"W x 30.000"D

Fig. 34

123745.00003

490



Large - Typical Sizes
 2400, 3900 & 4500 PG/900 & 1200 ADLS
 Max 2400 PG/800 ADLS Single Sided
 Max 4800 PG/1600 ADLS Double Sided
 Size ~60,000"H x 68,250"W x 30,000"D

Fig. 35

123745.00003